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General Articles

SCARBOROUGH: THIS YEAR'S CONFERENCE TOWN

F. BUCKLEY HARGREAVES

Scarborough has long been known as an outstandingly attractive resort. Look up any gazetteer of the year 1800, and you will find no mention of many well-known watering places, but of Scarborough you will find a great deal. For natural beauty, rugged grandeur of environment, historical and literary associations, and variety of entertainment, she stands alone.

To gain an idea of the natural setting of Scarborough—imagine a large figure 3 reversed. The top half represents the curving, graceful lines of the North Bay running towards Scalby; the lower half corresponds to the South Bay running towards the white cliffs of Flamborough. The middle spit, between the two bays, is the Castle Hill—which the Romans used as a signal station during their occupation of Britain. It was from the Castle Hill that warning was given to the Roman Legions stationed at York, by smoke signals, of the approach of foreign invaders.

The Castle Hill is now surmounted by the ruins of Scarborough Castle which has played a valiant part, not merely in Scarborough's, but in Britain's history. It was shelled by the Germans when they bombarded the town in the early days of the last war.

Few seaside resorts can boast such a magnificent natural setting. A walk to the top of Castle Hill gives one a bird's eye view of the town and its attractions. At the foot of the gaunt cliff, where the North Sea breakers crash and roar, is the Marine Drive. It took eleven years to carve this seaside drive out of the rock, for time and time again the foundations were swept away, but what seemed impossible was at last accomplished, and this magnificent drive—the finest in the British Isles—was at last completed, providing two-and-a-half miles of sea-front, unspoiled by shops or habitations, with an unrivalled view out over the North Sea. This Marine Drive is the connecting link between the North and South Bays.

Under the lee of the Castle Hill, at the northern edge of the South Bay, sheltered from the severe gales of the winter, nestles the harbour where the herring drifters leave for the fishing grounds. From the harbour, half way up the hillside, climb the picturesque fishermen's cottages of the Old Town. Here there are old smugglers' dens, and a house on the harbour front where King Richard III stayed. Quite recently an old smuggler's inn has been converted into the headquarters of the British Tunny Club—the latest sport to come to the harbour, from whence, before the days of steam, ships left to sail the Seven Seas.

Sweeping south, from the harbour wall, is an unbroken stretch of golden sands, running down to the Spa and the open-air bathing pool. Rising behind the Spa are cliffs, terraced with gardens which have no equal anywhere in the British Isles, and behind and beyond these cliffs rises Oliver's Mount, an eminence visible far out to sea.

Turning now to look northward from our vantage point on Castle Hill, there again lies a wide, sweeping stretch of sand, fringed at the far end by some new bathing bungalows and skirted by a miniature railway. Almost adjoining the sea front, about half-way across the North Bay, lies Peasholme Park. This park covers the site of the old Manor of Northstead, which has interesting associations with the Crown and Parliament. When a Member of the House of Commons wishes to resign, he applies for "The Chiltern Hundreds." This is the ancient manor of the Chiltern Hundreds; and Northstead Manor is also used for this purpose. Retiring Members of Parliament are appointed to these manors in rotation. Any Member of Parliament who applies for and accepts the stewardship of Northstead Manor, and wishes to visit his lands, will have to take a boat out on Peasholme Lake, for the ancient manor now lies below its waters. Portions of a Roman fireplace are still visible at one part of the lake.

A short distance beyond Peasholme Park, in a natural valley just behind the sea front, the Scarborough Corporation has built a £60,000 open air theatre—the only permanent open-air theatre in the British Isles. The huge stage is on an island in the middle of a lake—enabling such a scene as that showing the arrival of courtiers by barge at the water's edge to be presented with the most realistic effect. This must be the only theatre in the world to have its stage on an island, but in such an ideal situation that thousands of people can sit and watch the show in comfort. This year, Sir Edward German's light opera "Merrie England," will be produced at this theatre, twice weekly, Mondays and Thursdays, from July 20th to September 7th.

A view of the North Bay taken from the Castle wall. Magnificent views of the coastline are obtained from the Castle.

Such is the bird's-eye view of Scarborough as seen from the top of Castle Hill. The hill is also the key to a hinterland of wild moorland which runs up and beyond Whitby with its historic Abbey, and down towards the brig at Filey, and Flamborough's towering cliffs. The romantic character of Scarborough's surrounding country is best shown by the fact that there are no fewer than five magnificent Abbey ruins within easy motoring distance—Byland, Whitby, Rievaulx, Kirkham and Fountains. The beautiful gorge of the Derwent, famed throughout the country as Forge Valley, is only four miles from the town. Seven miles away lies Filey, with a wonderful spur of rock, known as Filey Brig, running out to sea. Scarborough, too, is an admirable centre for visiting some of the famous Yorkshire houses, such as Castle Howard and Burton Constable, Hovingham and Burton Agnes near Bridlington. Beverley, with its magnificent Minster, is also within fairly easy reach.

A striking tribute to the unspoilt nature of the country and moorland immediately behind Scarborough was paid by Professor Patrick Abercrombie, of the University of Liverpool, in a County Planning Scheme which he recently submitted to the North Riding County Council:

"There are no seaside towns of the importance of Scarborough and Whitby which have such an expanse of magnificent moorland immediately behind them.

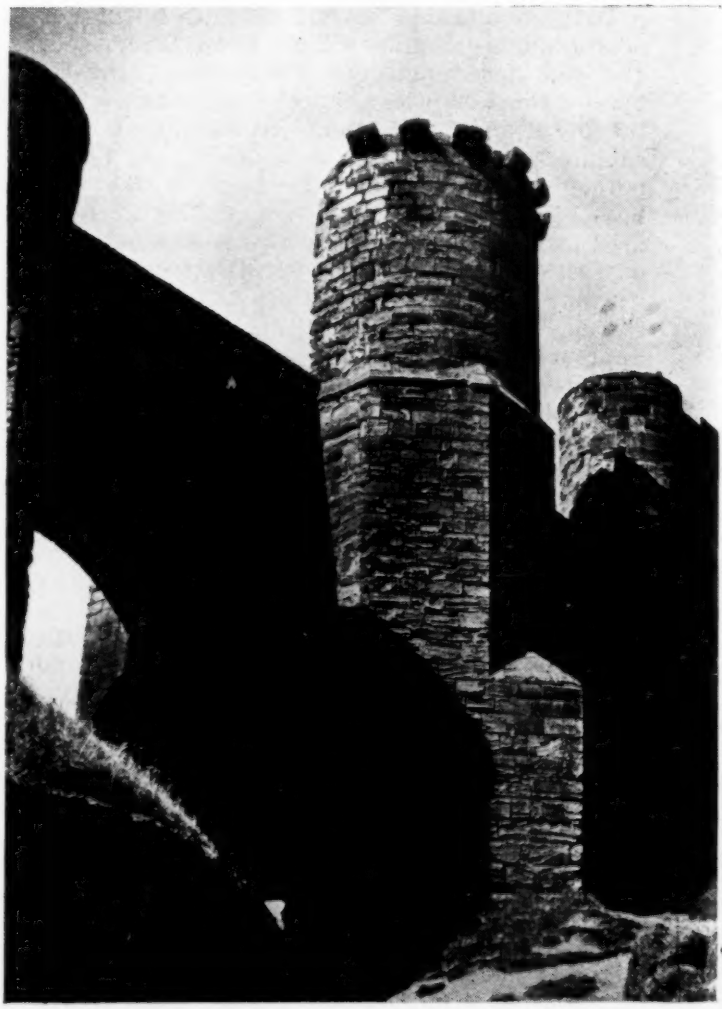
"Chiefly owing to the fortunate persistence of several large estates, these moors are absolutely unspoilt. But the very openness of their expanse, which gives such a scale to the scenery, is a source of danger. A few bad buildings dotted here and there, exploiting possibly some special 'beauty spot' or view, would do irreparable damage.

"A survey of the North Riding has revealed the fact that, whereas it has so far escaped much disordered and disfiguring growth, it is nevertheless a vulnerable piece of country. . . . Small changes can do big damage. . . . Nature's endowment of natural beauty in moor, dale and coast are an economic asset of first importance to one of the district's chief occupations, the tourist and holiday business."

Scarborough's natural setting is unique and unrivalled, her history long and romantic. She existed before the Romans came. In fact, so old is she that the Herald's Office has been totally unable to assign a date to her Arms.

Nowadays she caters for holiday-makers—and in the most catholic fashion.

With its sea and moorland air, Scarborough is a particularly bracing place. During the summer months, when visitors wish to escape the heat inland, the town has been found to be 3·6 degrees cooler than in the South, while during December, January and February, the



An unusual angle photograph of one of the ramparts of Scarborough Castle. Standing under this arch, the visitor can see both the North Bay and look out over the Harbour across the South Bay.

South has only been 0·6 degrees warmer. The rainfall is much below the average and visitors are almost entirely free from the discomforts of fog at all times of the year. Sir Leonard Hill has shown that "bracingness" is fundamentally a question of the cooling power of the atmosphere as dependent upon temperature, vapour pressure and wind, and while authority has it that according to this criterion the East coast emphatically scores, proof of the mildness of the climate both in winter and summer is amply given by the remarkable gardens of Scarborough, where there is always something bright in flower during winter months, when places much farther South are waiting for the daffodils.

The Scarborough gardens cover so large an extent that shelter can be found from every wind. The St. Nicholas Gardens are a perfect refuge from west and north winds, the Peasholme and Valley Gardens are protected from cold south-east winds in a remarkable way, while the gardens by the Mere on the western side of Oliver's Mount are a refuge from all east winds in spring, and even on dull days enjoy a fair amount of sunshine.

But the most notable of all Scarborough's gardens are perhaps the Italian Gardens, which are fashioned out of the undercliff of the South Bay in the classic style and are of outstanding beauty.

Reference has already been made to Peasholme Park and to the wonderful Open-Air Theatre. Suffice it to say that the Open-Air Theatre at Scarborough cannot be matched at any other watering place in the United Kingdom and should be visited. To see it in the day time, however, cannot possibly convey the impression given by a performance after nightfall.

Scarborough's visitors are offered the choice of two golf courses, on the South Cliff and on the North Cliff, both of them 18 holes, and, of course, there is the famous course at Ganton, within easy reach of Scarborough.

There is safe bathing in both bays. In the South Bay, there is a large open-air bathing pool, one of the earliest sea-bathing pools to be built on the coast, and recently modernised and vastly improved. Quite near to this there is a Beach Bathing Station, where there are facilities for sea and sun-bathing.

The Spa deserves special mention. In 1602 a Mrs. Farrow took a walk in the South Bay, and noticed a stream that appeared to be of a curious colour. The stones at the bottom were a distinct russet. She walked back a little and saw where the stream bubbled from the earth, "and finding the water to have an acide taste—being a discreet Gentlewoman and also physically addicted—she thought it probable to have some medicinal quality, and thereupon did both try it herself and persuaded others also that were sickly to drink it. . . ."

As a result of the discovery, Scarborough's Spa became the rage. Quoting from an old record: "At length it became well known to the citizens of York, and the Gentry of the County, who do constantly frequent it, yea, to several persons of quality in the Nation."

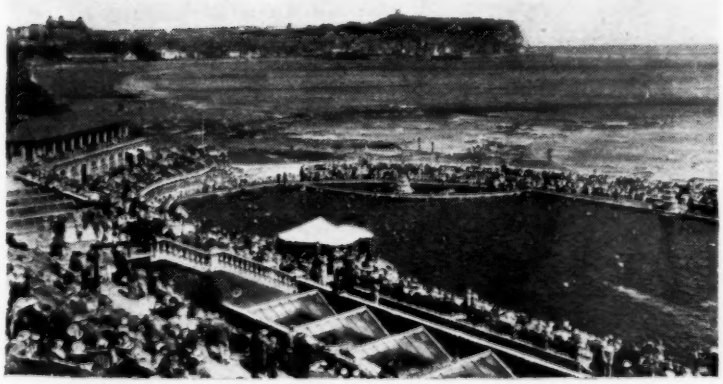
The Spa has undergone many changes since those early days. Here there is good music. This summer the Spa orchestra will be conducted by Mr. Kneale Kelley, until recently the conductor of the B.B.C. Variety Orchestra. The Scarborough Spa orchestra is one of the largest seaside orchestras in the country. Visitors can listen to the music, take the waters, dance, or sit idly watching the sea. The Spa is still the fashionable hub of Scarborough.

For hunting men, the Staintondale and the Derwent Packs hunt the adjoining country, the Staintondale being one of the oldest packs in England.

For many years now Scarborough has been a favourite centre for conferences. From a geographical point of view it is conveniently situated for national assemblies, being midway between London and Edinburgh, and within easy reach of the Midlands and the North.

The long list of conferences which have met at Scarborough in recent years is in itself a tribute to the popularity of the town as a congress centre. Conference halls of various sizes are available, and others offer facilities for social functions.

Scarborough, rich in historical associations though she is, is not content to live on those old memories of far-off days. She weds them to newer recreations and holiday facilities in the most remarkable way. Known for generations as England's *Queen of Watering Places*, she only asks you to visit her once, in the confident knowledge that you will visit her again.



The unsurpassed Bathing Pool in the South Bay. The Castle Hill can be seen across the Bay.

TRAVELLING IN EUROPE

WILLIAM S. STEVENS, Major R.A.V.C. (T.A.)

It is an additional means of entertainment to the veterinary surgeon when traversing Europe to investigate the veterinary services, including colleges, and general animal culture of the countries through which he passes. Having recently returned from a visit to Portugal, Spain and parts of France, I thought it might be of interest to English-speaking veterinarians to read a few notes about some of the conditions found in those countries.

Whilst touring Portugal, one is reminded that although this country is one of the smallest in size, she was at one time the greatest colonising power in the world; ultimately she exhausted herself by this effort, and is only now recovering.

The mule, both pack and draught, is still in evidence as one of the principal methods of carrying goods about Portugal and Spain, and although some of the main roads carry up-to-date motor traffic, there are many roads in a similar condition to that which existed hundreds of years ago. Mules are, as a rule, well looked after and cared for by the owner, their food consisting mainly of locust beans and straw on which they get quite fat. There is little forage or green food as we know it in England.

Cases of cruelty to animals—sore backs and bodies and lameness—which used to be no uncommon sight on the Continent, have nearly disappeared in most parts; at all events, I did not see any cruelty; nevertheless, I am informed that in some of the remoter regions there is still room for improvement. As a matter of fact, however, progress in this direction has been very marked.

Having received an invitation to visit the "free clinic" for animals of the poor in Lisbon, I called in the afternoon and was introduced to a Veterinary Captain of the Portuguese Army who was doing duty, as apparently veterinary officers only work in the morning in Spain and Portugal and theirs is still a half-time job. This officer being free after midday had offered his services voluntarily at this free clinic in order that he might keep his canine and feline work up-to-date.

He invited me into the operating clinique to watch a few of the cases being diagnosed and treated. Amongst the voluntary attendants were women who handled the small animals, and everything one saw tended to make a good impression of cleanliness and efficiency for this class of work. The treatment for specific eczema in dogs adopted here was new to me, namely, extraction of blood from a convenient vein by means of a hypodermic syringe, this blood being injected subcutaneously under the lesions present. I was told that this method had met with great success in Portugal, although a Spanish veterinary surgeon, on the other hand, said it was not of much value. Both in Spain and Portugal the incidence of eczema in dogs had increased very markedly during the last few years.

Madrid has the most important veterinary college in the Peninsula although I had great difficulty in finding anyone who knew where it was or had ever been there. Like many Government buildings in Spain this was at one time a monastery and the rooms were very lofty; this was so even in the case of the operating theatre which had only been built a few years. It was in the same style, and special efforts had to be made to keep this theatre reasonably warm in the winter. Madrid, which stands at a great elevation, is exposed and very cold, except in the summer, and the room in question was surrounded on three sides by glass. The principal, Dr. Rafael Gozalez Alvarez, who kindly showed me round, had an attendant who waited for him in the passages with his overcoat and hat which he put on or removed as he left or entered the rooms.

One of the interesting sights of this college is a valuable set of about 100 Spanish Delf-style drug jars all with the Jesuit mark boldly set on the front above the name of the contents, a gift to the college. Another interesting feature of this institution is the library of very old Spanish veterinary works. Apparently during the period that Spain was the leading colonising country, and also high in contemporary culture, due attention was paid to veterinary science. This was, of course, some hundreds of years ago, and the library in question was the result of this work and presented as a gift to the college on condition that it was housed so that the public could have free admission.

Not being a Spanish scholar, I felt rather at sea although assisted by a good interpreter. He had great difficulty, as the Spanish was written in the old style before or contemporary *with Shakespeare*. I was shown a book said to be dated in the 15th century written by M. Reina, which outlined the circulation of the blood in the horse and this would have been at least 50 years before Harvey's famous dissertation on the subject published at Frankfort in 1628; this, I think, justifies fuller investigation by the veterinary profession in general. There were, of course, many other interesting books in the library which I had not time to examine.

A very nice X-ray outfit had recently been fitted in the X-ray room, and although partly of German manufacture, had been completed in Spain. It gave very good results on the fluorescent screen, and I was informed that owing

to the high voltage exposure was only a third of a second for ordinary plate work. The fluorescent screen showed the action of the heart and lungs with beautiful clarity when a person stood behind it; the effect seemed to be partly stereoscopic.

In Barcelona I was kindly taken round by another veterinary officer who had finished as usual at mid-day. He made up his time by doing the veterinary work at the dog racing track and kennels. The surfaces of the racing tracks here are not grass but sand and apparently do not cause so much lameness as we have in England. They run two kinds of dogs, native and English. The native are a poor lot and not kept in good condition, and no grooming is done. Most of the dogs live away from the track. This officer also showed me over a military veterinary hospital for contagious diseases which had been either a convent or a monastery at some earlier time. I was also shown a horse-breeding establishment with French stallions of a very stocky heavy draught type like pony shires and was promised an inspection of a Spanish cavalry barracks, but owing to a "state of alarm" having been called, permission could not be granted without going to a higher authority, for which there was not sufficient time.

Although the Spanish mule is the general motive power on the farms, not many are seen in the towns, the reason being that their legs will not stand up to town work and they are not so amenable to traffic as horses.

From Barcelona I passed over the Pyrenees to Toulouse, the agricultural and military centre of the south of France. It is here that the new French veterinary college has been built but not yet equipped. Toulouse is a fair-sized town but rather of the sleepy, agricultural kind—especially marked at the present time because the number of troops stationed here is smaller than used to be the case.

The old college, over which I was shown, reminded me of old Camden Town. It was, however, larger and better built, but I almost had my breath taken away when I was shown the new college which is just outside the town over a slight rise in the ground, lying about a quarter of a mile or perhaps less from the main railway station. I was kindly escorted there by two of the professors of the old college.

Although the new college lies in a dip of the ground, it is quite a landmark and looks like a small "White City," being constructed of reinforced concrete. On the way there we passed an obelisk which stands on top of a small hill. This, strangely enough, one professor insisted on calling a memorial to Wellington, but on examination I found from the inscription that it was put up in memory of the French soldiers who were killed during the Peninsular war.

To go back to the new college, while I do not think it could be better described than I have said, as a small edition of the "White City" in London, I do not mean by this that it is small as veterinary colleges go; on the contrary, it consists of a large main building which contains a central courtyard inside which I judged one could place the London Veterinary College. The buildings surrounding the courtyard are in turn surrounded on three sides by several out-buildings of which one is the hostel for 200 students, another building stabling for horses and a third for cattle only, which animals will receive *equal* educational attention in the future. The reinforced concrete is almost devoid of decoration, but the general appearance is very striking. Everything is given up to the utilitarian point of view and well planned. Although it had taken only a year to build, I was informed that it would be three years before it could be occupied. Whether this was because of the time to be taken in furnishing and equipping or was, on the other hand, a question of finance, I do not know. This new college appeared to me to be an answer to the German veterinary college at Leipzig, which I visited about eight years ago when it was just finished, and which was then certainly the finest in the world. Probably, however, when the Toulouse College is equipped it will be superior; at any rate, it is better arranged, as the Leipzig buildings are, in my opinion, too scattered—the Toulouse College is better planned and more compact. When I was shown over Leipzig, the guide lost his way and had to go back to the main gate and start over again, whereas this could not happen at Toulouse.

It is hard to describe this Toulouse College further for, as I have already explained, it is not yet equipped, but I may cite some items which will give an idea of the thought taken in planning and organisation. Firstly, the dog kennels, each kennel having its separate outside run connected with a door which could be controlled inside the passages by the attendant by moving a small lever. Another interesting feature was the dissection room, where electric lifts were to be fitted to pass the carcases, when not being dissected, into the basement for cold storage until required again. The lecture theatres were designed with the latest form of lighting, namely, the whole of one side being glass looking on to the courtyard with additional lighting, but only of minor power, by means of small circular discs inset into the ceiling.

There was just one point where economy had been misplaced; the French Government could have purchased the necessary land slightly nearer the town, but naturally at a higher price, and now the new college buildings have been completed it is found that owing to the large size and position, a new road will have to be

constructed which will probably cost as much as the extra value of the better-placed site.

From Toulouse to Paris is a night's journey, where Alfort Veterinary School, the largest in France at present actually working, is situated. The college is outside the old boundary walls, but is really within the present confines of the town which has extended itself considerably since the college was first built. Visitors will remember that the buildings of this college are not cramped but stand in spacious grounds, so that there is even room for a small plot of land on which to grow green forage.

I was disappointed in Alfort, which I had not visited since the days I was a student at Camden Town and my remembrance was of large, stately buildings. However, values have changed and the buildings now appear rather cumbersome. The small-patient department, however, has been specially favoured, and the kennels, only a few years old, give a very good impression of cleanliness and efficiency.

My guide "gate-crashed" into a students' class on "Parasitology," in which living exhibits were used to illustrate the clinical demonstration. Apparently dogs and cats with the various skin diseases are kept as specimens. I was shown, with apparently some little pride, a case of demodectic mange in a dog which hardly had a hair left on his skin, which was corrugated all over. He appeared well nourished and apparently as comfortable as could be expected. I was also shown what was described as a case of syphilis of the upper lip of a cat which was deformed and permanently turned up owing to the swelling caused by the disease, but they were not sure of the diagnosis.

There is a large students' hostel at Alfort, which I had not time to go over, and it was here that I met my first elephant in hospital. He was suffering from cellulitis and bad sores due to lying in stale urine, and was fitted with slings to prevent his lying down. The student in charge was on quite good terms with his patient who, although he did not mind having his sores dressed, strongly objected to internal medication. The agent was exhibited hidden in an apple, his favourite food; when presented, he quietly placed the stuffed apple on the ground and put his foot on it!

Paris is a town where the Percheron horse still has its say in transport, and no one wishes to push it off the streets. One of the large Paris stores employs only Percherons and no motors and has a special parking place for vans and horses by the side of the store. It should be noted that Percherons are good movers, although about equal in weight to our heavy draught horse, and the Percheron has to trot. There is little doubt, I think, that London horse traffic is often objected to because the horses are unable to strike into a smart trot, either because the horse is not of a suitable breed, or, as is frequently the case, is over-loaded. In my view, if it were made obligatory not to overload, and every vehicle was so horsed as to enable the animal to be put into a smart trot, no reasonable objection could be taken to horsed-vehicle traffic in London.

Clinical Communications

SOME CASES OF TICK-BORNE DISEASE IN CATTLE

J. M. FLETCHER, M.R.C.V.S.
Lochgilphead, Argyll

Case No. 1. *Subject.*—Two-year-old cross-polled bullock.

History.—The bullock had been grazing on hill pasture all summer and autumn along with five others. It was first noticed to be separate from the rest of the herd on September 30th, 1934. On October 1st it was observed stumbling over obstacles and was brought home (with difficulty).

Examination.—Shaking of the head, blindness, salivation, tremors of the triceps group of muscles in both fore legs with stumbling gait and increased excitability. Ticks were plentiful, especially on the brisket.

Diagnosis.—Trembling or louping-ill.

Differential Diagnosis.—Most other troubles such as stomach or intestinal disorders were eliminated by the fact that the appetite was quite good.

Treatment.—"Piromuth"—14 c.c. intramuscularly. "Piromuth" is a preparation of bismuth salts manufactured by Messrs. Willows and Co.

Course.—Much improved the following day and was completely recovered on the third day, showing very little loss of condition owing to the good appetite.

Case No. 2. *Subject.*—Cross shorthorn cow, in-calf.

History.—This cow, together with others, had been grazing on hill pasture in April, 1935, and was brought in on April 28th with profuse salivation, plant poisoning being suspected by the owner.

Symptoms.—Salivation, slight tremors of the head, pulse 74, temperature 104°. The appetite was good. Numerous ticks were present on the ventral aspect of the body.

Diagnosis.—Trembling or louping-ill.

Treatment.—"Piromuth"—10 c.c. intramuscularly.

Course.—Complete recovery in three days.

Case No. 3. *Subject.*—Ayrshire heifer.

History.—The heifer had been grazing on hill pasture in spring and first seen on April 30th, 1935. It had been brought in a week previously with symptoms of trembling and was gradually getting worse.

Examination.—Examination revealed salivation, marked trembling of the head, unsteady gait and excessive excitability; temperature 101·8°.

Diagnosis.—Trembling or louping-ill.

Treatment.—" Piromuth "—5 c.c.

Course.—The heifer was seen again on May 3rd, 1935, when there was marked improvement in condition and complete recovery ensued.

Case No. 4. *Subject.*—Cross-shorthorn cow.

History.—The cow had been grazing on hill pasture in spring and summer of 1935 and seen on July 26th.

Examination.—Examination revealed slight salivation with unsteady gait of the hind quarters with complete loss of power of the tail; temperature 103°. Numerous ticks present.

Diagnosis.—Trembling or louping-ill.

Treatment.—" Piromuth "—10 c.c.

Course.—Recovery in three days, but the tail never regained its power.

Case No. 5. *Subjects.* — Five cross-polled heifers.

History.—Fourteen heifers had been grazing on hill pasture in the spring of 1935; one had fallen ill and died, then two others became ill and after four days were *in extremis.*

Examination.—The two that had been ill four days when seen were in a very advanced stage, the symptoms being salivation, smacking sounds when the mouth opened, oedematous swelling below jaws, weak pulse, temperature 104° and 105°, extreme exhaustion and profuse diarrhoea.

Three others were found to be in the early stages of the affection with symptoms of salivation and temperatures ranging from 104° to 106·4°. All cattle were heavily infested with ticks.

Diagnosis.—Tentative diagnosis of tick-borne fever.

Treatment.—The two heifers that were *in extremis* received " Piromuth "—10 c.c. each—and the other three 8 c.c.; astringents were given in addition. The ticks were to be removed by hand from all affected cattle and also from the rest of the 14, which were brought off the hill pastures on to fields.

Course.—The two in the advanced stages died in two or three days; the other three made a good recovery and there was no further outbreak.

Discussion.—Tick-borne diseases, especially trembling or louping-ill, are much more common in tick-infested districts than has been realised, and a mild attack is quite a common occurrence in cattle grazed on hill pastures. One often sees a cattle beast with its head to one side and showing no other symptoms of disease. Very often that remains as a permanent defect. Nervous symptoms are predominant and may affect any part of the body, the head and fore quarters being more frequently affected. The most useful symptoms for diagnosis and differential diagnosis are the presence of nervous symptoms and the fact that the appetite except in advanced cases, is quite good.

As regards treatment, " Piromuth " is useful in the early stages when the disease has not yet established itself too firmly in the nervous system, but when the latter happens the writer is of the opinion that in cases where recovery takes place it is more by the intervention of *vis medicatrix naturae* than by any form of treatment.

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CEPHALIC OR LOCALISED TETANUS IN THE DOG

HENRY GRAY, M.R.C.V.S.
Kensington, W.

I was very much interested in the case of so-called " Non-specific Lockjaw in a Dog " as recorded in your issue of June 13th, but I cannot agree with the conclusion drawn by Mr. Henry Taylor, F.R.C.V.S., that because other muscles than those of the jaws were apparently normal it was not due to the bacillus of tetanus. This cephalic form of tetanus, although relatively rare, has been observed in the human species at least as often as it has been in the dog, following injuries, extraction of teeth, operations in the vicinity of the mouth or throat, etc. During my experience of over 50 years I have encountered six cases of localised tetanus but only two of generalised tetanus in the dog.

The first case with which I met, some 44 years ago, was in a pug from which a week before I had extracted some pyorrhoeic molar teeth. Beyond the trismus the animal had all the appearances of good health and did not seem much perturbed at the condition of the jaws. As I could not separate the jaws by ordinary means I placed the animal under chloroform and attempted to stretch them apart by means of towels placed on the upper and lower jaws. This having failed after several trials at intervals of a few days, I at last went to the extreme of placing the animal very deeply under chloroform and unintentionally killed it when making the attempt to stretch the jaws apart. This failure was a lesson to me to adopt the Law of Hippocrates and to leave the other five cases (two Airedales, a fox-terrier, a spaniel and a bull-dog) to take their natural course, only using *placebos* until they recovered within a month or five weeks from the first manifestation of trismus. About 50 years ago, when acting as an assistant in a general country and mining practice in the environs of Nottingham, I encountered my first case of

generalised tetanus in a black and tan mongrel that had a wound on the head from a kick by a horse. This case recovered in a month without any special treatment. Some 20 years ago I came across my second case, in a fox-terrier, following a wound on the head due to a bite. The same treatment, *vis medicatrix naturae*, was adopted with complete success.

Localised tetanus or *trismus neonatorum* used to be very frequent, especially in Ireland in new-born children during the 18th and earlier part of the 19th century. It is not rare in new-born lambs. In the human cases since the advent of bacteriology, the making of cultures of the wound scrapings and the inoculations in series of guinea-pigs, rabbits, etc., have shown that the bacillus of tetanus was the cause of cephalic or other localised forms of tetanus. Before the discovery of the bacillus of tetanus by Nicolaier, an Austrian medical student in 1885, what we know now as cephalic tetanus was denominated by surgeons as trismus, no reference being made to a localised form of tetanus.

It is remarkable that Baron Larrey (1766-1842), the distinguished French surgeon during the Napoleonic Wars, has not been surpassed in his description of tetanus.

Some surgeons have endeavoured experimentally to overcome the tetany induced in parathyroidectomised dogs by the use of curare, but as this drug has considerable variations in different samples it is difficult to estimate its value. Some or very few samples removed the tetany without causing paralysis. One sample removed the pathological rigidity in man without causing diminution of the voluntary power.

The antithesis of trismus in dogs is paralysis of the jaw, pure and simple. It is at times far from being rare and recovery in time is the rule. After the Great War, when rabies was re-introduced into this country, it was of frequent occurrence but had no connection with that malady.

GRASS SICKNESS IN SCOTLAND

Grass sickness in horses still continues to take a heavy toll of the horse population in Scotland, and up to the present there has been little progress towards discovering the cause or in finding a preventive. Last week, a petition signed by some 300 farmers was forwarded to the Highland and Agricultural Society of Scotland asking the Society to provide a prize of not less than 1,000 guineas, open to anyone who can discover satisfactory means either of preventing or curing the disease. The petition, forwarded by Mr. William Henderson, Lawton, Coupar-Angus, stresses the seriousness of the position and concludes thus: "We cannot think of any way in which the Society can more usefully and practically serve the interests of agriculture than in making this effort to deal with this most serious scourge."

Abstracts

[The Pathogenesis and Excretion of the Bacilli in Johne's Disease. Alexejeff-Goloff (1929.) *Zschr. Infektkr. Haust.* **36.** 313.]

This article contains, amongst other information regarding Johne's disease in experimental animals, the results obtained from detailed examination of four naturally infected cases. Bacteriological examination of the milk in three of the cows, with careful precautions against contamination, showed numerous acid-fast organisms which proved to be Johne's bacilli.

One of the cows was slaughtered during the third month of pregnancy and examination of and cultivation from the uterus yielded Johne's bacilli, a pure culture also being obtained from the foetus.

Another cow which showed symptoms of the disease three weeks before parturition gave birth to a normal calf which was immediately isolated from the dam and fed on milk from a healthy cow. One month later this calf was subjected to a bacteriological examination. Faeces, urine, scrapings of mucous membrane from vagina and rectum, and blood from a peripheral vessel, all showed typical Johne's bacilli to be present, although the calf remained normal. A week later on being vaccinated against anthrax with a serum-vaccine the calf showed a high temperature and acute diarrhoea, acid-fast organisms being recovered from the blood-stream and faeces in large numbers.

The author concludes from these observations that Johne's disease takes the form of a bacteraemia in which course the foetus may become infected in the pregnant animal.

B. B.-J.

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[A Possible Case of Congenital Johne's Disease. Dunkin, G. W. (1935.) *J. Comp. Path. & Ther.* **48.** 36.]

This paper reports a case of what is most logically explained as congenital Johne's disease.

The author was presented with a Jersey cow infected with clinical Johne's disease from a tubercle-free herd. The beast was placed in an isolation box and seven days later gave birth to a bull calf. Just before calving the hind quarters of the cow were carefully washed, the calf was not allowed to touch the ground and was removed at once to a new, clean loose box that had never contained a diseased animal, and reared on milk from a freshly calved healthy cow from a herd free from tuberculosis and Johne's disease. The dam was killed *in extremis* 14 days later and *post-mortem* examination revealed very advanced lesions of Johne's disease. Minute examination of the genitalia, however, was not made.

The calf was kept on account of its pedigree

and allowed to mature for use as a stud bull. At one month old he was turned out with young stock of the same age and at three months old there was little difference in size and condition to be noted in the young stock. At this age he was tested with johnin of known potency and a pronounced positive reaction was noted. At six months old a doubtful reaction was obtained and at twelve months a positive reaction was again noted. During this period his condition remained good and no diarrhoea was seen; examination of the faeces for acid-fast organisms every three or four months proved negative. At twelve months of age a slight attack of diarrhoea and inappetence was noted with return to normal in four days. The faeces were not examined, however, as the author was away at the time.

A photograph taken when the bull was three-and-a-half years old showed his bodily condition to be good apart from some lack of development of the muscles surrounding the femur and in the gluteal region. The author mentions that he has noticed this in several previous cases which have later developed clinical Johne's disease, and suggests that this lack of development, when taken into account with other points of history, may be an early manifestation of the disease.

At three-and-a-half years of age, eleven days after the photograph was taken, the bull developed his second attack of diarrhoea and was tested with synthetic johnin and proved positive. Acid-fast organisms were isolated from the faeces which proved to be Johne's bacilli.

Owing to the absence of an available isolation box the bull was destroyed thirteen days after the onset of the diarrhoea, which had been continuous.

Post-mortem examination immediately after death revealed a complete absence of tuberculosis; the animal had, however, never reacted to the test.

Lesions of Johne's disease were observed in the rectum, ileum, and ileo-caecal valve, the associated lymphatics being oedematous.

The submaxillary, pharyngeal, hepatic, bronchial, mediastinal, and mesenteric glands, the rectum, ileum, small intestine and testes were examined and direct smears proved positive from the mesenteric glands, rectum, ileum, ileo-caecal valve and small intestine.

Cultures and sections of the above organs were made but were not reported on by the time this article was printed.

B. B.-J.

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[The Double Intradermal Tuberculin Test. (Trans. title.) Cuillé J., and Chelle, P. (1935.) *Rev. Gen. Med. vét.* **44.** 522. 321-344.]

Since 1926, the double intradermal tuberculin test has been applied to more than 800 bovine animals. The majority of these tests has been undertaken with "old tuberculin," either undiluted in a dose of 0·1 c.c. or diluted one to four in a dose of 0·2 c.c. Recently, however, a synthetic medium tuberculin has been tried with entirely satisfactory results, since it has been found that in tuberculous cattle equally clear-cut reactions have been obtained as with "old tuberculin" diluted one to four, while the non-specific response in negative cattle has been materially diminished. The various types of reaction are noted; they do not differ from those described by English observers. Attention is directed, however, to the persistence of a nodule in the skin of reacting animals, sometimes with a necrotic centre, after the oedema has subsided.

In interpreting the results, it is recommended that an increase in skin measurement which is double or more the initial thickness should be regarded as positive, an increase of less than half the initial thickness as negative, while intermediate reactions can be classified as doubtful. [Records based on measurements alone without reference to the character of the swelling may be fallacious. This point is evidently recognised by the authors since they also state that the majority of doubtful reactions are tuberculous and that in any case oedema, heat and pain are to be taken into consideration.]

In addition to the observations described above, a series of experiments on desensitisation was undertaken. No reduction in allergy was found in animals which, after an initial double intradermal test, were retested at intervals of 48 hours and eight days respectively. Desensitisation was not induced by the subcutaneous injection of a single dose of tuberculin. Thus 35 animals inoculated subcutaneously were tested intradermally at intervals varying from 48 hours to eight days: in each case a marked reaction was obtained. With larger doses of tuberculin, the results were not so clear-cut. For example, of eight cattle receiving a double dose of tuberculin subcutaneously and tested twelve days later by the intradermal method, six reacted typically but two were regarded as doubtful. In a second experiment, six animals received repeated doses of tuberculin subcutaneously and were tested intradermally in the intervals. At varying periods (two to four weeks) all the animals ceased to react, *i.e.*, they appeared to have become completely desensitised.

The article concludes with a discussion on the relative value of the various tuberculin tests supplemented by *post-mortem* details. For example, 387 animals were tested by the combined subcutaneous and double intradermal methods. In 35 instances, contradictory results were obtained. In 34 cases, a positive intradermal reaction was accompanied by a negative subcutaneous. Twenty-four of these animals

were slaughtered and all were tuberculous at autopsy. One animal only which was intradermal negative but subcutaneous positive showed tuberculous lesions. In the view of the authors, these results amply confirm the contention of Buxton that the double intradermal test picks out a higher percentage of reactors than the subcutaneous. The question of non-specific reactions is also discussed. It is admitted that on rare occasions the double intradermal test may give a positive response in an animal which on *post-mortem* is apparently entirely free from tuberculosis. It is pointed out, however, that such results are not peculiar to the double intradermal test, but also occur with other methods.

R. E. G.

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[**A Note on Acquired Immunity to Theileria annulata.** Sturman, M. (1935.) *J. Comp. Path. & Ther.* **48.** 298-299.]

The author records observations, made in Palestine during the years 1933 and 1934, on the incidence of attacks of theileriasis in 1,450 cattle whose history as regards previous piroplasm infection had been accurately recorded.

Three hundred and sixty cases of infection with *Theileria annulata* were observed, about half of which occurred in animals with a history of a previous infection within three years, and about half in animals which had not suffered from a previous attack. Whilst no deaths took place in the former class of animal, the latter group suffered a mortality of about 33 per cent.

The loss of milk from a secondary attack varied from 25 litres to 100 litres per cow, whilst in primary attacks the loss averaged 1,000 litres per cow. It is difficult to decide whether an attack in an animal with a previous history of infection is due to a fresh infection or to a relapse, but as the disease is seasonal and occurred in both classes at the same time it is considered that re-infection could occur within three years of a primary infection, but the resultant disease was mild.

U. F. R.

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[**Treatment of Trypanosomiasis by Tartar Emetic, Antimosan and "Surfen C." in the Gold Coast.** Stewart, J. L. (1935.) *J. Comp. Path. & Ther.* **48.** 316-318.]

This article contains some notes on the susceptibility of the various breeds of cattle in the Gold Coast to trypanosome infection, the West African Shorthorn cattle being very resistant and the Zebu breed very susceptible. It is interesting to note that immunisation to rinderpest has rarely been responsible for breakdowns to trypanosomiasis.

Observations are recorded on the treatment of cattle infected with *T. vivax* and *T. congolense* with antimosan in five doses of 40 c.c. at weekly intervals, tartar emetic in five doses of 12 to 15 grains given intravenously at intervals of five days, and "Surfen C." given intramuscularly at a dose of 100 c.c. Whilst the first two methods of treatment appeared to be very satisfactory, only very rare relapses occurring during an observation period of two years, the "Surfen C." failed to prevent relapses in 14 out of 52 animals treated.

It is noted that tartar emetic treatment of horses has given good results, animals kept under observation for five years remaining free from relapse. The case is recorded of one horse infected with *T. vivax* in which the parasite appears to have become "fast" to antimony.

U. F. R.

Report

NEW SOUTH WALES DEPARTMENT OF AGRICULTURE

LIVE STOCK DISEASES REPORT FOR YEAR ENDING JUNE 30th, 1935.

The work of the Department suffered considerably from the resignation of a number of veterinary officers and veterinary surgeons employed as inspectors of stock, who were attracted to other States, private practice and commercial firms by financial inducement.

At the Glenfield Research Station routine diagnosis work was much curtailed. In the research side of this Institute the following observations, likely to be of interest to our readers, were made: (*a*) The application of the complement-fixation test, using antigen as prepared by Ebert and Peretz and following the technique of Campbell and Turner, proved highly satisfactory in the diagnosis of contagious bovine pleuro-pneumonia. (*b*) Cervical metritis, next to vaginitis, is the commonest cause of bovine sterility in the State. Investigations into the origin of sterility have shown that the infection is spread by the bull from cow to cow. By mating unaffected heifers with only clean bulls they may be kept free from the infection, whereas when such heifers were mated with older bulls, commonly used for mating with cows affected with sterility, it has been found that they quickly become affected with various forms of genital disease leading to sterility. (*c*) Theileriasis, in a benign form, has a distribution which coincides with that of the common scrub tick, *Haemaphysalis bispinosa*, which in all probability is the responsible vector. Babesiasis also occurs, but there is no evidence of anaplasmosis in the State although it exists in adjacent parts of Queensland. (*d*) The harmlessness of repeated dosing of sheep with carbon

tetrachloride was demonstrated. Three lots of sheep comprising aged merino wethers, young sheep affected with fluke disease and ewes in lamb were drenched with the drug (dosage not given) at monthly intervals for ten months without ill effect. One lot of aged wethers was treated fortnightly for the same period also without harm. (*e*) Contagious abortion of swine due to the porcine strain of *Br. abortus* has been demonstrated, but its incidence is low. (*f*) Infectious laryngo-tracheitis of poultry, a disease hitherto not known to exist in Australia, was detected in the State for the first time.

The activities of the field staff included: (*a*) The suppression of contagious bovine pleuro-pneumonia by slaughtering reactors to the complement-fixation test, as carried out at Glenfield. The statement that "there can be no question but that this is the ideal method of dealing with pleuro-pneumonia contagiosa" deserves the serious consideration of our interested colleagues overseas. (*b*) The control of anthrax by vaccination. (*c*) The prevention of black disease of sheep by snail destruction, vaccination and drenching with carbon tetrachloride. Snail destruction seems to be the best method of prevention. Vaccination gave variable results. (*d*) Tuberculosis eradication. Public press propaganda has been a helpful contribution to the development of tubercle-free milk production. Existing accredited herds have been maintained but, owing to financial and staff stringency, development of this work has been curtailed. (*e*) Tick eradication by applying quarantine to infested areas and dipping the animals therein was continued in accordance with the recommendations of the Cattle Tick Commission. (*f*) The suppression of sheep lice and keds by regular dipping of infested sheep.

W. K.

SPECIALISED COURSES IN THE MICROSCOPY OF FOOD AND DRUGS

Commencing October 7th, courses will be held each Wednesday at Bradford Technical College on the microscopy of food and drugs, and on biochemical analysis. Courses on microbiology, including bacteriology, will be given at the Leeds College of Technology starting Wednesday, September 23rd.

* * * * *

RABIES IN SOUTH AFRICA

The Cape Peninsula has been placed under strict veterinary control as a result of one certain and one suspected case of canine rabies in Capetown. Rabies is endemic in most of the Union, being carried by the mongoose and other small veld carnivora, but this is the first time it has penetrated as far as Capetown.

* * * * *

According to a statement made by Mr. Elliot, labour inspectorates under the Ministry of Agriculture are now open to women as well as men. Veterinary and live stock inspectorates are, however, reserved for men.

N.V.M.A. Divisional Reports

WESTERN COUNTIES V.M.A.*

ANNUAL MEETING AT EXETER

The 52nd Annual General Meeting of the above Division was held at the Rougemont Hotel, Exeter, on Wednesday, March 18th, 1936.

Owing to the unavoidable absence of the President (Mr. Fraser), the Chair was occupied by the senior Vice-President (Mr. R. H. Smythe). Mr. J. W. H. Holmes, M.R.C.V.S., D.V.S.M., from the Department of Medicine, Royal Veterinary College, London, gave a demonstration of the examination of skin scrapings, including the use of Wood's glass for the diagnosis of ringworm.

The following members signed the attendance book: Majors Ascott, James and Fyrth, Messrs. R. H. Smythe, R. B. Nelder, E. R. Edwards, C. Masson, E. Thorburn, R. E. L. Penhale, D. R. T. Hoddinott, J. Bradshaw, W. H. Chase, A. Mather, E. W. Ascoli, J. Willis Thwaite, H. Macdonald, E. B. D. Hall, W. G. Blackwell, C. R. Parsons, H. C. Wilkins, L. W. Bovett, C. V. Watkins, L. E. Perkins, C. W. Townson, J. K. Irvine, P. Fisher, R. R. Willing, Esmond Brown, Major Rankin and S. J. Motton (Hon. Secretary).

The following visitors were present: Miss Hutton (London), Messrs. J. W. H. Holmes, H. M. Webb (Sidmouth), T. H. Irwin (Bideford), E. G. Conisbee (Axminster), A. M. McDonald (Dulverton), and A. C. Urquhart (Exeter).

Apologies for absence were received from: Sir Frederick Hobday, Major Dunkin, Col. Head, and Messrs. Fraser, Bloye, E. C. Bovett J. C. Stephens, Barbour, Penhale (Holsworthy) A. R. Smythe, W. L. Richardson, Kauntze, Norman, C. Crowhurst, F. T. Harvey, G. Harvey, and R. G. Saunders.

Obituary.—Before proceeding to the general business of the meeting, the CHAIRMAN referred to the sad loss sustained by the Division in the death of Captain Percy. A letter of sympathy had been sent to his relatives, and as a mark of respect those present stood in silence.

The minutes of the previous meeting, having been published in the *Veterinary Record*, were taken as read, and signed as correct.

Correspondence.—Letters from candidates for election to the R.C.V.S. Council were read.

Resolutions from the Central Division which were passed at its meeting held on January 16th in London, in connection with the free treatment of sick animals of the poor, were placed before the meeting.

In response to the appeal for subscriptions for a presentation to Sir Frederick Hobday, the Division voted £2 2s. to the fund.

*Received for publication, June 10th, 1936.

Payment of Expenses of Delegates to the N.V.M.A. Council.—The Council submitted a report on this question, and the Secretary was instructed to write the N.V.M.A., to the effect that the Division thought it unfair to expect delegates to pay their own expenses. The funds of the Division could not bear the payment of the full expenses. It was decided to pay return third-class fare of delegates for three meetings of the year. The Division thought the funds of the N.V.M.A. could not stand the strain of paying the expenses of delegates from all of the Divisions.

New Members.—Mr. C. R. Parsons, of Launceston, and Mr. W. T. Richardson, of Wadebridge, were unanimously elected members of the Division.

Resignation.—The resignation of Mr. J. H. Patterson, of Exeter, was received with regret.

Reports.—The annual reports of the Hon. Treasurer and Hon. Secretary were received and adopted.

ELECTION OF OFFICERS

The election of officers for the ensuing year then took place, as follows :—

President.—Mr. C. V. Watkins.

Vice-Presidents.—Messrs. Fraser, Smythe, Nelder and Townson.

Hon. Auditor.—Mr. E. R. Edwards.

Hon. Treasurer.—Mr. R. B. Nelder.

Hon. Secretary.—Mr. S. J. Motton.

The Council.—The President, Hon. Treasurer, Hon. Auditor, Hon. Secretary, and Messrs. Norman, Masson and R. H. Smythe.

Representatives on N.V.M.A. Council.—Messrs. R. B. Nelder, R. H. Smythe and S. J. Motton.

County Secretaries.—Dorset, Major Fyrth ; Somerset, Mr. A. G. Saunders ; Devon, Mr. R. B. Nelder ; Cornwall, Mr. S. J. Motton.

Next Meeting.—It was decided to hold the next meeting at the Seale-Hayne College, Newton Abbot.

Exhibit.—Mr. TOWNSON exhibited an X-ray photograph showing a fractured os coronae. The bone was fractured while the mare was hunting.

The Examination of Skin Scrapings, including the use of Wood's Glass for the Diagnosis of Ringworm*

DEMONSTRATION BY J. W. H. HOLMES, M.R.C.V.S., D.V.S.M., OF THE DEPARTMENT OF MEDICINE, ROYAL VETERINARY COLLEGE, LONDON

Mr. Holmes, having thanked the Division for inviting him to give the demonstration, suggested the following as the equipment which a veterinary surgeon should possess for carrying out the examination of skin scrapings : Test-tube stand ; test tubes of $\frac{3}{4}$ in. bore (lipped mouth) ; centrifuge tubes ; microscopic slides, $\frac{7}{8}$ in. No. 2 square cover glasses ; $\frac{1}{2}$ in. No. 2 circular cover glasses ; glass tubing of 7 mm. bore for making pipettes (pipettes cannot be easily cleansed and should be discarded after use) ; rubber teats to fit glass tubing ; flexible Bard Parker blades (used blades are suitable) ; plasticine to hold cover glasses in flotation method ; pair of Whitfield's epilation forceps (stainless) ; saucepan for sterilising forceps ; watchmaker's lens (which is useful in the collection of material for examination in suspected cases of ring-worm) ; centrifuge machine ; liquor potassae ; sugar solution (1 lb. sugar in 12 ozs. water) ; lactophenol (lactic acid 1 part, carbolic acid crystals 1 part, glycerine 2 parts and water 1 part) ; Noyer's resin and lanolin cement (made as follows : gently heat 1 part of lanolin until frothing due to water has ceased, then add 4 parts of resin, stirring until a homogeneous mixture results—the mixture in a melted state is poured into a tin for storage) ; microscope with $\frac{2}{3}$ and $\frac{1}{6}$ objective, and preferably fitted with a mechanical stage ; ultra-violet ray apparatus, complete with Wood's glass.

Mr. Holmes exhibited a number of interesting microscopic slides and series of photographs dealing with ringworm and with mange parasites.

The demonstrator then gave a practical demonstration, explaining details as he proceeded, of the preparation of temporary and permanent specimens of skin parasites for microscopic examination, and of the use of Wood's glass for the diagnosis of ringworm.

In connection with mange parasites, the method of preparation and examination of direct smears was discussed. The sedimentation and flotation techniques were demonstrated.

With regard to the demonstration of the causal parasites of sarcoptic mange in the dog, Mr. Holmes said that it was much more easy to demonstrate this parasite than many practitioners believed, and in clinical cases there was not much difficulty in demonstrating it in 60 per cent. of cases. "The best material for examination is from the double fold at the posterior border of the dog's ear, where one can usually find little pin-head sized pieces of sandy yellowish brown scab. (A dog which shows a marked scratch reflex, with the leg of the same side as the ear being rubbed, is usually found to be affected.) Another good site for scrapings for the sarcopt is on the outside of the tibia from a red non-excoriated papule. The depth of the scraping is very important. The hairs should be plucked—simple clipping is not enough—and the hairs with any scab should be placed in a test tube half-filled with liquor potassae. The area is then painted with liquor

*A portable ultra-violet apparatus and a Wood's glass were kindly lent by Messrs. John Bell and Croyden.

potassae, and a scraping taken, going deep enough to produce a raw surface. A Bard-Parker blade is useful for getting the scraping, which is put on a slide with a little liquor potassae, and it is covered with a square No. 2 cover glass. The specimen is gently heated to clear it and to drive out bubbles, after which it is examined under a $\frac{2}{3}$ objective. (The surface on the dog from which the scraping has been taken should be dusted with a little talcum or some similar material.)"

The lecturer expressed the opinion that it is a great advantage if the scrapings can be taken by the person making the microscopic examination. "A negative result in the laboratory, he said, does not mean that the disease does not exist. It may be necessary to take several scrapings. In large animals mixed material should be taken when possible from various sites if the microscope is at home. This material is examined by flotation or sedimentation technique.

"In case the direct smear proves negative, the hair and scab in the test tube should be heated to boiling point, until a homogeneous syrupy liquid is obtained. This should be centrifugalised for about two minutes. The supernatant fluid is pipetted off, and the deposit can be examined as in the case of the direct smear.

"The flotation technique first introduced by Sheather is better than the sedimentation method. It is carried out as follows: The material is boiled in liquor potassae. It is then centrifugalised—100 turns of the hand centrifuge is adequate. The supernatant fluid is removed by means of a pipette and the tube is then half-filled with water and finally filled to the brim with sugar solution. After inverting several times with the thumb over the mouth of the tube, it is re-centrifugalised. A piece of plasticine stuck on the end of a glass rod is now pressed on to a $\frac{1}{2}$ in. circular cover glass which is allowed to touch the top of the fluid. The cover glass with the drop of the fluid adhering is then placed on the slide and examined under $\frac{2}{3}$ and $\frac{1}{6}$ objectives.

"The sugar flotation technique has the advantage that it concentrates the mites into a small field, and it is only necessary to examine the area covered by one, or possibly two, $\frac{1}{2}$ in. circular cover glasses, instead of a number of slides made in the sedimentation technique using $\frac{7}{8}$ in. square cover glasses.

"In using the centrifuge it is a help to colour the fluid in the balancing tube with ink or stain.

"In the case of sheep scab, the parasites can often be seen with the naked eye or with the aid of a watchmaker's lens. Alternatively, the same technique as outlined for sarcoptic mange should be adopted.

"*Follicular Mange.*—It is usually easy to find the *Demodex folliculorum*. In the pustular form, the material from a pustule is the best for examination. In the squamous type, the hairs are pulled out and the scraping is examined as in the case of sarcoptic mange, using direct smear, flotation or sedimentation technique."

Ringworm.—Out of 224 skins examined in the past year in small animals, Mr. Holmes said he had discovered 25 cases of ringworm. It was pointed out that ringworm in cats often shows itself as little more than a slight scaliness, and that it is often suspected as the result of cases of ringworm on the glabrous skin of people in contact with the animal. During the demonstration of the use of Wood's glass, it was shown that vaseline on the skin also fluoresced. "The fluorescence due to vaseline," observed the demonstrator, "is whitish purple as distinct from the greenish yellow seen in cases of ringworm. In the examination of skin for microsporon ringworm, Wood's glass is very useful, and if it fails to show ringworm infection of a given area a scraping in that position is unlikely to reveal it. Scales on the skin may fluoresce somewhat. Wood's glass should be used as an aid to diagnosis, and the material fluorescing should be microscopically examined for confirmation.

"When not possessing a Wood's glass, one takes a fold of skin between the thumb and finger, pulls out broken hairs with epilation forceps, and places them on a slide in lacto-phenol or liquor potassae, covering with a No. 2 square cover glass. The specimen is examined under $\frac{1}{6}$ objective, after gentle warming. One does not often find fungus threads but usually spores from ringworm in the lower animals when due to trichophyton or microsporon. In the human variety fine threads and spores may be seen.

"In the case of favus type of ringworm, simply take a pinhead sized piece of scab and treat with liquor potassae, or lacto-phenol, covering with a cover glass and examining after gentle warming. Mycelial threads and spores are seen."

Mr. Holmes also demonstrated the preparation of permanent specimens, mounting in lacto-phenol and luting round the edge of the cover glass with Noyer's resin and lanolin cement applied by means of a hot wire. "This technique," he stated, "is useful when legal proceedings are possible, as in the case of recently purchased animals."

At the conclusion of the meeting, votes of thanks were accorded to Mr. Holmes, the retiring President (Mr. Fraser), and to the Chairman (Mr. R. H. Smythe) for conducting the meeting.

S. J. Motton, *Hon. Secretary.*

DERBYSHIRE V.M.A.*

PAINLESS DEHORNING OF CATTLE DEMONSTRATED AT SUTTON BONINGTON.

A meeting of this Division was held at the Midland Agricultural College, Sutton Bonington, Loughborough, on Tuesday, April 21st, 1936. The President, Mr. L. A. Auchterlonie, was in the chair and there were also present Messrs. H. Burrow, R. S. Cockburn, F. A. Davidson, G. Durrant, G. Eaton, P. M. Evershed, H. C. Gregory, O. V. Gunning, R. S. Howe, E. Wilkinson, and the Hon. Secretary.

Visitors present were: Messrs. T. P. Briscoe, W. H. Bishop, J. McPhail Fraser, F. A. Gordon, A. Kelly, W. F. Kochan, J. S. Oldershaw, W. Maitland and J. McLinden.

Apologies for absence were received from Messrs. G. R. Benbow, H. S. Cockburn, W. L. Sheffield, H. W. Steele Bodger and H. L. Torrance.

Minutes.—The minutes of the last meeting, having been published in the *Veterinary Record*, were taken as read and signed.

Correspondence.—(1) From the Central Veterinary Society, regarding two resolutions relating to the treatment of animals of the poor that had been passed by the Society. The meeting was in sympathy with these resolutions.

(2) From the National Association for the Prevention of Tuberculosis, inviting the Association to nominate a delegate to attend a Conference in London. It was agreed that no delegate be sent.

(3) From Mr. J. F. D. Tutt, Winchester, requesting that his candidature for election to the Council R.C.V.S., be brought before the meeting. His election address was read.

Nomination of New Members.—Mr. Davidson nominated Mr. C. W. Maitland, and Mr. Auchterlonie nominated Mr. A. Kelly.

Election of New Members.—The following were unanimously elected as members: Mr. F. A. Gordon, Mr. T. P. Briscoe, Mr. J. M. McLinden, Mr. J. T. Turney, and Mr. A. H. Hunter.

Expenses of Representatives on the Council N.V.M.A.—Arising out of the nomination of representatives to serve on the Council N.V.M.A., it was agreed that the Division pay reasonable expenses incurred by representatives attending Council and Committee meetings.

Election of Honorary Members.—Mr. G. J. Furness (Alfreton), and Mr. George Howe (Buxton), were unanimously elected honorary members. Both Mr. Furness and Mr. Howe were among the founders of the Division as the Derbyshire Veterinary Association in 1918.

*Received for publication June 17th, 1936.

Demonstration of the Painless Dehorning of Cattle

This demonstration was given by the President, Mr. L. A. Auchterlonie, who made the following observations regarding it.

"This demonstration is the result of the appearance in the *Veterinary Record*, April 21st, 1934, of an abstract of an article by Emmerson in the *Veterinary Extension Quarterly* of the *University of Pennsylvania Bulletin*, October 15th, 1933, on 'Nerve Blocking in the Dehorning of Cattle.' The dates are of great significance particularly when it is noted that Emmerson demonstrated painless dehorning before the 50th annual meeting of the Pennsylvania State Veterinary Medicine Association in October, 1932, just 3½ years ago.

"I have proved to my own satisfaction that the method is excellent and effective and I have used it for dehorning cows whose horns have grown into the head or are threatening to damage the eyes, and also for 'cleaning up' smashed horns which continually get knocked and bleed.

"Emmerson had not used the method for dehorning bullocks but solely for dairy cows and in his paper he states: 'It is claimed that the horned beef breeds fatten more quickly when they are dehorned. Diary cattle are said to be better producers following dehorning. Vicious animals when deprived of their weapons of offence become less of a menace to others.' These statements will no doubt be accepted as facts by those veterinarians who have practised dehorning on a commercial basis.

"It is a humane thing that the Animals Anaesthetics Act of 1919 enacts that: 'It is an offence punishable by a fine not exceeding £5 to dishorn cattle over one month old unless the animal during the whole of the operation is under the influence of some general anaesthetic of sufficient power to prevent the animal feeling pain.' Until 1919, the law of England was settled by the case of *Ford* v. *Wiley* in the Queen's Bench Division in 1889, in which case 'dishorning for slightly increasing the value of the stock was held to be unjustifiable and unnecessary and was, therefore, cruelty.' The Court of Justiciary in Scotland and the Queen's Bench Division in Ireland refused to follow this case and held that if performed skilfully and in the usual manner, dehorning was not an offence under the Cruelty to Animals Acts (*Vide V.R.* No. 50, Vol. xv, p. 1532). I have already stated that my experience of the method only extends to what may be described as the 'surgical horn,' and I think I may say that prior to nerve-blocking, there were many horns which were just left alone in my own practice because of the disinclination of the farmer to have the animal chloroformed. The abstractor of Emmerson's paper notes: 'This article, therefore, affords yet another example of the obsolescence of the

1919 Act,' and in respect to dehorning I absolutely concur.

"As far as we are concerned to-day, it is not necessary to go deeply into the surgical anatomy. Firstly, the structural basis of the horn is the cornual process of the frontal bone and as the animal reaches maturity this becomes excavated and forms a portion of the vast and intricate frontal sinus. The corium of the horn, like that of the hoof, is very vascular, and receives its blood supply from the cornual artery, the terminal branch of the superficial temporal. The nerve supply is from the cornual nerve which is formed by the fusion, within the orbit, of two branches of the lachrymal nerve, and it passes just below the prominent lateral ridge of the frontal bone which can be felt in the live subject by passing a finger between the eye and the base of the horn. It is covered by thick skin, fascia, frontalis and scutularis muscles and fat at a depth varying with the condition of the animal but can usually be reached by a needle of from ½ to ¾ in. in length. It is relatively deeply placed just above the eye and becomes more superficial as it passes towards the horn. It eventually divides to encircle the tissues at the base of the horn. [A dissection of the part was displayed which showed the various structures very clearly.]

"Emmerson's method is 'By drawing an imaginary line through the middle of the orbit and the middle of the base of the horn, about midway between the orbit and the base of the horn on this line, the operator palpates the lateral border of the frontal bone; a 1½ in. 20 gauge needle is then put in, in a downward and inward direction, keeping as close to the lateral border as possible.' He inserts the needle to only about half its length. The anaesthetic he used was 4 per cent. procain with adrenalin, and 5 c.c.s were injected. The first horn which I removed by this method of anaesthesia was a 'snuff' horn which grew down and very close to the head and it was impossible to adopt the method of injecting the anaesthetic described by Emmerson. I accordingly inserted a ½ in. needle vertical to the skin and used 2 per cent. novocain. Anaesthesia was complete in 20 minutes. I have continued to use this method, except that I now use Parke Davis's parsetic, which is 2¼ per cent. ethocain with adrenalin, and I may use a slightly longer needle in some cases. Pricking the skin at the base of the horn is a good method of determining whether anaesthesia has been established, more particularly where only one horn is to be removed and the other horn may be used for comparison. Even in using the weaker anaesthetic complete desensitisation has resulted in more than one case in five minutes. This may have been due to dead accurate infusion of the nerve by chance. Emmerson himself advocates the stronger solution as he says the weaker solutions require a wait of from 20 minutes to half-an-hour. My intention has been to make the dehorning an operation to be carried out whilst actually at the farm for some other purpose. In this case, the nerve block is carried out on arrival and the dehorning done later. In other circumstances a stronger solution will be used.

"The method of removal in my case is by a saw; a moderately coarse cut, stainless steel tenon saw is used. The object being merely to correct the surgical condition, there is no need for shears, which are required, however, if the operation is a commercial one. The arrest of haemorrhage is achieved by applying some gauze and a bandage. Even if both horns are removed a little of each remains on which to find a hold for the dressing. Some horns bleed less than others and may be left uncovered.

"The after-effects of removal by saw are negligible, but according to Emmerson, the use of shears results occasionally in fracture of the corium and of the frontal bones with serious consequent trouble.

"It is wholly delightful to remove a horn at the root while the animal stands in its stall with only the nose held. It is unfortunate that the demonstration case did not turn out very well and that anaesthesia was so very late in coming on, but this I believe was due to the very short needle used and it need not be taken as in any way discouraging. The method of nerve-blocking for painless dehorning, brilliantly devised by Emmerson, has come to stay."

The demonstration was well discussed by those present and a hearty vote of thanks was accorded to Mr. Auchterlonie.

The meeting ended by the company taking tea together.

W. J. Ironside, *Hon. Secretary.*

In Parliament

The following question and answer was recorded in the House of Commons during last week:—

Scotland (Grass Disease)

Sir E. Findlay asked the Secretary of State for Scotland whether his attention has been drawn to the renewed outbreak this year of grass fever among horses in the north-east of Scotland; and whether his Department will cause an investigation to be made into the incidence of this disease with a view to its prevention or cure?

Sir G. Collins: The reply to the first part of the question is in the affirmative. This disease has been for several years and still is the subject of intensive research by the Animal Diseases Research Association in collaboration with other scientific authorities and veterinary practitioners, but up to the present they have not been able to elucidate the cause of the disease nor to discover means for its prevention or cure.

ROYAL COLLEGE OF VETERINARY SURGEONS

Membership Examinations, July, 1936.

LIST OF SUCCESSFUL CANDIDATES

London

FOUR YEARS' COURSE

Class B

Bacon, J. N. H.

Class C

Abbott, A. A.
Abbott, A. V. H. G. (H)
Iszard, Miss P. E. R.
Phillips, Miss L. H.
St. John, Miss S.

(H) Denotes credit in Hygiene.

Class D

Anderson, L. G.
Blaxland, J. D.
Chesney, R. W. L.
Evans, K. G. D.
Gates, G. M.
Green, D. A.
Ham, H. E. C.
Morgan, R. P.
Moss, Miss J. E. M.
Perry, V. E.
Phillipson, A. T.
Pitcher, L.
Pott, F. C. H.
Saunders, Miss G. M.
Singh, Gurbachan
Stenning, W. W.
Thalau, A.
Thonger, H. C.
Thornton, P. W. D.
Twyman, Miss N.
Walther, A. L.
Woodger, Miss E. H.

FIVE YEARS' COURSE

First Examination

Baxter, Miss K. A.
Beale, Miss J. H. M.
Bezant, Miss K. M.
Buckner, D. R. P.
*Cotchin, E.
Davies, A. M.
Davies, W. G.
Dorman, A. E. (C)
Esdaile, Miss A. G.
Fisher, Miss E. J. (B)
Geffen, L. R. G.
†Greeves, D. H.
Harries, L. G.
Jonas, A. C.
Lipscomb, Miss S. C. (B)
Marshall, Miss C. B.
Mastin, V. L. (C)
Morrison, J. M.
*Neave, R. M. S.
*Parsons, J. H.
Redgrave, A. H.
Rudland, G. A. H.
Salmon, Miss S. M. (B)
Somerwill, G. L.
Stephens, A. D.
Steel, P. G.
Thomson, W. W.

† Denotes 1st Class Honours.

* Denotes 2nd Class Honours.

(C) Denotes credit in Chemistry.

(B) Denotes credit in Biology.

Second Examination

Abrams, Miss A. M. (H) (A/M)
Anthony, J. E. (P)
Bentley, Miss M. A. W. (A/M)
Birkett, H. (P)
Boden, K. A. (A/M)
Butler, C. A.
Cumberbatch, R. L. E. (H)
Downe, C. H. (H) (A/M)
Farmer, Miss G. J. (A/M)
Freak, Miss M. J. (A/M)
Fuller, L. W. C.
Griffiths, T. L. (H)
Hanman, Miss M. E.
*Hart, J. F.
Hobbs, P. H. (P) (A/M)
Jeaffreson, Miss A. M. (A/M)
*Johnson, S. P. L.
Jones, Miss K. M.
Joss, G. E.
Khan, M. H.
*Kraft, Miss I. R.
Lewis, R. W. E.
Maillard, Miss M. C. E. (P) (A/M)
Mason, G. S.
Nixon, G.
Parker, G. B.
Pemsell, J. D.
Plumbly, G. P. (A/M)
*Pocock, Miss M. F.
Ricks, Miss O. W. (A/M)
Sparke, D. J.
*Sprent, J.
Spriggs, D. N.
Streeter, Miss H. F. S.
*Studdy, E. V.
†Taylor, D. W. B.
Temple, R. R.
Thompson, J. D. H. (A/M)
*Tutt, J. B.
Wait, P. (A/M)
Wakley, L. J. (A/M)
Weedon, D. A. J. (A/M)
Wilmot-Smith, J. P. (P) (A/M)

† Denotes 1st Class Honours.

* Denotes 2nd Class Honours.

(P) Denotes credit in Physiology (including Biochemistry).

(H) Denotes credit in Histology and Embryology.

(A/M) Denotes credit in Animal Management.

FIVE YEARS' COURSE

Third Examination

Allen, G. S.
Balls, D. F. V. (H)
Barnett, S. F. (H)
Bennett, G. H.
Bingham, Miss M. L.
Bowett, J.
Cabban, K. E. (P)
Chivers, P. R. (H)
Crowther, R. W. (A)
Edmonds, B. C. M.
Edwards, J. B.
Francis, J.
Green, R. A. (A)
Gwyer, R. G.
Heath, P. T.
Hunt, D. K. (P) (A)
James, C. D.
Jarvis, J. A. J. (H)
Jolly, D. W.
Joshua, Miss J. O. (P) (H)
Lawton, Miss R. (A)
Lee, J. A. (P) (H)
Lochead, Miss M. E. (H)
Massie, Miss M. N.
Mather, P. A.
Neal-Morris, R.
Ovington, R. P.
Owen, D. W.
Roach, R. W.
Rowson, L. E. A. (P) (H)
Rose, J. E. R.
Spellman, J. E. M.
*Walker, C. W. M.
Worden, A. N. (A)
Yalden-Thomson, Miss M.

* Denotes 2nd Class Honours.

(P) Denotes credit in Pharmacology, etc.

(A) Denotes credit in Anatomy.

(H) Denotes credit in Veterinary Hygiene, etc.

FIVE YEARS' COURSE

Fourth Examination

*Asplin, F. D.
Brancker, Miss W. M.
Cooke, R. G. T. (Paras.)
Crowhurst, R. C. (Paras.)
*Davies, C. V.
Ellis, J. H. (Paras.)
Greatorex, J. C. (Paras.)
Green, A. R. (Paras.)
Howell, Miss D. (Paras.)
King, J. O. L.
Laugier, G. V. (Path.)
Lemon, D. A. (Paras.)
Mackenzie, P. Z. (Paras.)
Moller, A. W.
Neve, Miss H.
*Nicholson, D. S. S.
Scutt, Miss C. M. (Paras.)
Sellers, K. C. (Paras.)
Skinner, H. H. (Paras.)
*Stephens, T. K.
Teverson, Miss R. (Paras.)
White, E. T. A. (Paras.)
*Withers, F. W.

* Denotes 2nd Class Honours.

(Path.) Denotes credit in Pathology.

(Paras.) Denotes credit in Parasitology.

Notes and News

The Editor will be glad to receive items of professional interest for inclusion in these columns.

Diary of Events

July 20th.—Meeting of the Editorial Committee, N.V.M.A., at 2, Verulam Buildings, Gray's Inn, W.C.1, 4 p.m.

July 16th.—Annual Summer Meeting of the Lancashire Division, at Preston.

July 17th.—Summer Meeting of the Mid-West Division, N.V.M.A., at Stroud, at 2.30 p.m.

July 24th.—Summer Meeting of the Royal Counties Division, N.V.M.A., at the Institute of Animal Pathology, Cambridge.

July 29th.—Meeting of the Derbyshire Division, N.V.M.A., at Derby, 2.30 p.m.

August 22nd.—Entries for Jubilee Memorial Bursary Examination.

Sept. 14th-18th.—N.V.M.A. Annual Congress, Scarborough.

Sept. 22nd, 23rd.—Jubilee Memorial Bursary Examination.

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PERSONAL

BRITISH VETERINARIAN'S HEROIC WORK IN ABYSSINIA

Consul's Tribute to Colonel Stordy as Refugee Camp Commander

A Stirring Report

When Colonel R. J. Stordy, *C.B.E.*, D.S.O., M.R.C.V.S., was appointed by the R.S.P.C.A. to command the Veterinary Relief Unit ("Silver Star" Unit) sent to Abyssinia to relieve suffering amongst the animals employed in military operations, he little thought that he would be called upon to play the principal rôle in the tremendous drama of organising human aid which, so soon after his arrival, centered around the British Legation Refugee Camp at Addis Ababa.

The thrilling story is revealed in a Government White Paper* issued on Thursday of last week, which details the happenings during the "reign of terror" after the Emperor's departure for Djibuti. "The situation developed so unexpectedly as the result of the Emperor's final acts in the night of May 1st-2nd, and police control broke down so quickly and completely into common banditry, that no pre-arranged withdrawal of British communities into the Legation was possible," says the British Consul, Mr. C. G. Hope Gill, in his report.

"As provisional camp officers I selected Colonel Stordy, chief of the Silver Star Veterinary Unit sent out by the Royal Society for the Prevention of Cruelty to Animals, and his assistants Messrs. Latham and Lloyd, since it was clear by mid-April that their own work was forced by circumstances to end. They transferred themselves and their equipment, much of which subsequently proved of great use, to a camping site in the Consulate garden, and Colonel Stordy was kind enough to take over and develop all the provisional arrangements for the reception and care of refugees. On April 28th I made him 'Refugee Camp Commandant and Quartermaster' elect. He perfected his preparations during the next few days, and was ready to cope with the influx of destitute refugees which began in the early hours of May 2nd and continued for three days, rising from some 700 on the first day to a total of nearly 1,800 on May 5th, day of the Italian entry.

"I cannot speak too highly of Colonel Stordy's devotion to this exacting and voluntary task. His handling of every kind of problem was energetic and efficient throughout. His personality over-ruled all difficulties, material, physical, communal, including the strain of incessant work at an unaccustomed altitude and a relatively advanced age. His report pays well-earned tribute to the voluntarily conscripted staff which helped him to succeed so well."

Colonel Stordy's Vivid Report

Colonel Stordy's report, which is, of course, included in the White Paper, contains the following passages:—

"With the fall of Dessié and consequent embarrassment of the Government, it became evident that, should the Administration cease to exercise authority, law and order in the capital would suddenly cease to exist.

"With a prevision begotten of experience, His Majesty's Consul took early action to plan the formation of a camp within the confines of the Legation, wherein refugees from the city and its environs might find that protection which the British authorities could afford them.

"Therefore, in consultation with Major Charter, O.C. Legation Guard, and his medical officer, Captain T. E. Palmer, I.M.S., the Consul selected a provisional site, and preliminary operations were undertaken to provide the camp with an efficient sanitary scheme.

"The extraordinary conditions prevailing in Addis Ababa had brought to a standstill the work of the Silver Star Veterinary unit which I had the honour to command, and accordingly, when His Majesty's Consul invited me to undertake the duties of Camp Commandant and Quartermaster, I accepted, and on April 28th I became responsible for the subsequent preparations.

"As the forest area was considered inadequate to meet a large influx of refugees, the main camp was laid out in the spacious open paddock lying to the south-east corner of the Legation grounds, leaving the forest area to be used as a screened position in case of danger, a shady retreat from the sun and an admirable situation for communal kitchens and camp bakery.

"In view of the cosmopolitan nature of the foreign communities in Addis Ababa, it was thought wise to define areas for the reception of the respective nationalities and communities, and to group them in such order as to minimise the danger of discord arising by reason of

*Ethiopia No. 5 (1936). Cmd. 5213. Reports and correspondence regarding the rescue and relief of foreign nationals at Addis Ababa during the disturbances of May 2nd to 6th, 1936. To be purchased directly from H.M. Stationery Office at the following addresses: Adastral House, Kingsway, London, W.C.2; 120, George Street, Edinburgh, 2; York Street, Manchester, 1; 1, St. Andrew's Crescent, Cardiff; 80, Chichester Street, Belfast; or through any bookseller, price 4d. net.

racial or religious prejudices. Accordingly the camping ground was laid out in eight sections. . . .

British Islanders, American and Scandinavian nationals were provided with camping ground below the Legation residence, where the large spreading trees afforded grateful shade.

"It was indeed well that all these arrangements had been made, for in the very early hours of Saturday morning, May 2nd, an extremely serious situation suddenly developed in the city and, 'ere sunrise, a considerable number of refugees presented themselves at the Legation gates appealing for admission, and were at once placed within the grounds.

"In due time His Majesty's Minister, Sir Sidney Barton, gave orders for the refugees to be received in camp and the camp gates were thrown open. As the day advanced, the looting and rioting in the city extended, and created such panic that the flight of the refugees assumed the proportions of a rout, hundreds of men, women and children seeking asylum within the Legation grounds. Their flight had been so precipitous that many arrived in camp with only the apparel they were wearing. While the more fortunate brought with them remnants of their personal effects, many were in an extreme state of fear and exhaustion, others with feelings obviously blunted by reason of grievous loss sustained.

"Each person on arrival was registered and given a coloured ticket corresponding to the colour of the section set aside for his reception. Each ticket was numbered, and thus the number in each section could be at once ascertained, and the total number in camp recorded for rationing. At the Legation gates all firearms were caused to be surrendered, an identification tally attached, a receipt given and the arms stored with the Quarter Guard. The surrender of arms was imperative in order to ensure the safety of the camp population, and scrupulous care in searching everyone entering the grounds had to be exercised, for even beneath the voluminous skirts of the Greek clergy automatic pistols and pouches of ammunition were found concealed.

"As the numbers in camp increased the provision of tentage became a very serious problem. A number of corrugated iron sheets, previously stored by order of His Majesty's Consul, and a half-a-dozen tarpaulins of large dimensions, supplied from the Silver Star Veterinary Unit's equipment, were placed in service, and these, supported on hastily constructed wooden frames, gave some sort of shelter to the refugees during the first night in camp, which was happily moonlit and dry.

"On the following day, Sunday, May 3rd, the Legation Guard moved into their new barracks, and thus released a substantial quantity of tentage, but even this valuable addition did not suffice to meet requirements. It was reported that a considerable number of corrugated iron sheets left by Greeks could be obtained from the ground of the Belgian Legation, so a party was despatched in a motor lorry and successfully returned with some 300 sheets of much needed material. The small hospital which serves the Legation in normal times was packed with Sisters from the Swedish Mission, the verandah of the dispensary became an open-air dormitory, and even the cells of the Consulate prison were requisitioned for storage. Board and lodgings were generously provided in the respective private residences of the Legation Staff, and Sir Sidney and Lady Barton, notwithstanding their multifarious duties and their long and anxious vigil at the bedside of the mortally wounded Dr. John Melly, provided accommodation and offered hospitality to a large number of the Diplomatic Corps and personal friends.

"It was therefore somewhat satisfactory to know that on the second night of the camp—a night of heavy rain—everyone had been provided with a modicum of shelter. Still, much damage was done to bedding, furniture, sewing machines and other property for which no provision could be made.

"Every hour saw numerous additions to the camp population until a total of approximately 1,520 persons had been registered, exclusive of Abyssinian men, women and children, numbering close on 250 souls. Of those, a large number were members of missions conducted by various English, American and Swedish Societies. The registered persons, numbering 1,520, comprised members of 28 nationalities and communities, (detailed numbers are given). It was at first calculated that the Armenians would be the largest community to take advantage of the camp, and accordingly an adequate section was marked out. As the figures prove, the Greeks were the largest represented. The paucity of the British to the total number of registered persons is particularly worthy of mention."

After giving particulars of the arrangements made in connection with the provision of water, rations and clothing, Colonel Stordy proceeds:—

"Captain Palmer, assisted by Drs. Hanner and Senyavin, was on duty daily at the dispensary at 8 a.m. and 4 p.m. The numbers of patients attended were:—

		Gun-shot wounds.
Saturday, May 2nd ...	22	—
Sunday, May 3rd ...	51	10
Monday, May 4th ...	67	12
Tuesday, May 5th ...	119	21
Wednesday, May 6th ...	55	(camp evacuated)

"Of the gun-shot wounds only two were caused within the camp. Mr. Alfred Buxton arrived in camp with a gun-shot wound in the left leg, the result of rioters attacking his caravan when evacuating his mission to safety. At the same time two Ethiopian female members of his staff were killed.

"It should be here recorded that the nursing sisters of the Beita Saidi Hospital gave valuable assistance to the sick and wounded. Jomadar Harbant Singh and nursing orderlies Bishan Singh and Karim Singh, of the Indian Hospital Corps, remained on duty night and day throughout the duration of the camp."

There were but two deaths, that of an Arab brought into camp with a gun-shot wound in the head and, alas, that of "Dr. John Melly, gun-shot wound in the chest, died at Legation Residence."

"Picquets supplied by the Legation Guard were stationed at several points around the camp, and during the nights of May 2nd, 3rd and 4th, additional picquets, drawn from refugee volunteers, were posted.

"It is pleasing to record that the order maintained was excellent, and, with the exception of one or two cases of petty theft, no untoward incident occurred; nevertheless, it was thought expedient to round up all Abyssinian males, for there were good reasons to doubt their trustworthiness, and on Monday, May 4th, every adult male was paraded and interrogated, and only those who could be vouched for by their masters registered and allowed to remain.

"The reckless discharge of firearms by natives, who had become wildly excited through the acquisition of large quantities of ammunition

pillaged from the Government arsenal, was a contant source of danger and annoyance. With the exception of the cases of wounding already mentioned, fortunately, no further harm took place, but every now and again a spent bullet was heard to fall, and the Sisters of the French Catholic Mission, closeted in the Legation Hospital, had a narrow escape when a spent leaden bullet, fired from some obsolete weapon, came through the open doorway and passed over the recumbent figure of a praying nun, to lodge itself in the floor.

"Situated as the British Legation is some six kilometres from the centre of the capital and approached for the greater part of the distance along a road marked by dense eucalyptus woodland, those engaged in the work of rescue had indeed a precarious task to perform. Captain Taylor is, it is understood, dealing with this aspect of the situation, and it is left to him to record the brave and excellent work accomplished.

"On Tuesday afternoon, May 5th, the advance column of the Italian Expeditionary Force was heard approaching, and at 3.50 the first cars escorted by a motor-cycle patrol passed the gates of the Legation over which was unfurled the Union Jack. Right on throughout the night the monotonous drone of engines and the rumbling of heavy vehicles continued. By 8 a.m. in the morning of May 6th it was estimated that some 2,000 motor vehicles had entered Addis Ababa, bringing from Asmara by way of Dessié an army of occupation of close on 25,000 men.

"The arrival of the huge Italian Army brought the reign of terror to a close, and, with security established, refugees were permitted to leave camp on the morning of May 6th. As all were naturally anxious to ascertain the extent of the damage to home and property the exodus from the camp, although rapid, was conducted in a very orderly manner, and by the evening of May 7th the refugees' camp had closed its gates.

"The period of the camp, short in duration it is true, was nevertheless a time of severe strain and anxiety, and as the evacuation of the camp proceeded, many refugees of all classes stepped forward and expressed—often in faltering terms—their appreciation for the security, courtesy and hospitality vouchsafed them by His Majesty's Minister and Staff. Such appreciation made one feel that our labours had not been in vain, and that the task accomplished under extremely difficult conditions had once again maintained the high prestige of our race."

Colonel Stordy concludes his report with an expression of his gratitude to a number of those who rendered eminent services, including his colleagues in the erstwhile "Silver Star" Veterinary Unit.

There appears to have been no direct animosity against the foreign community, according to Captain R. H. R. Taylor, Assistant Military Attaché. The only foreigners killed or wounded, other than by stray bullets or by drunken men, he states, were those who were defending their property.

"How people escaped as they did from the indiscriminate shooting is beyond belief," he adds. "During the first two days men pressed the triggers of the rifles, irrespective of where the latter were pointing, whenever a vehicle passed them."

Also contained in the White Paper are letters of appreciation from the American, Belgian and Turkish Ambassadors in London to Mr. Eden for the prompt and efficient assistance of Sir Sidney Barton and his staff in the evacuation of their nationals.

* * * * *

Dr. George Hilton Honoured.—At the convocation exercises of the University of Montreal, held on May 29th, Dr. George Hilton, Veterinary Director General of Canada, was honoured by the conferment of the degree of Doctor in Veterinary Medicine. Dr. Hilton is an Honorary Associate of the Royal College of Veterinary Surgeons.

. . . . .

Marriage.—Golledge—Hannam. On Wednesday, June 10th, at All Souls, Langham Place, Lionel St. Bel Golledge, M.R.C.V.S., of Sherborne, son of the late Major C. Hedworth Golledge and Mrs. Golledge, of Holywell House, West Coker, to Dorothy Annie Hannam, eldest daughter of Mr. and Mrs. Stanley Hannam, of King's Green, Bourton. A reception was held afterwards at The Langham Hotel, only immediate relatives being present. Mr. John Lesley, friend of the bridegroom, was best man.

. . . . . .

Birth.—Buckner. On June 22nd to Mr. and Mrs. C. A. P. Buckner, 102, Ash Road, North Cheam, Surrey, a daughter.

. . . . .

Appointments.—The following have recently been appointed whole-time Assistant Veterinary Officers to the Essex County Council:—

Ford, Reginald; MacGregor, Peter; March, Clifford Frederick; Mason, John Francis; Taylor, Ian Stephen Mackintosh.

. . . .

Colonial Veterinary Service.—Mr. W. Orr has been appointed Veterinary Officer, Malaya.

* * * * *

R.C.V.S. OBITUARY

Carroll, Thomas Joseph, Church Street, Cavan. Graduated Dublin, December 11th, 1912. Died June 11th, 1936.

McLaren, Lawrence, Rickarton, Comrie, Perthshire. Graduated Edinburgh, December 20th, 1894. Died July 3rd, 1936, aged 71 years.

Mr. Lawrence McLaren died in an Edinburgh nursing home. He was the son of a farmer in the parish of Lawers, Perthshire, and was for 40 years in practice in Brechin, Angus. He retired five years ago, taking up residence in Comrie in his native county. He was unmarried.

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R.C.V.S. Library Catalogue

The catalogue of books in the library of the Royal College of Veterinary Surgeons is now on sale, price 1s., post free. It can be obtained from the Secretary, 10, Red Lion Square, W.C.1. It contains a list of all books published since 1900, together with a list of the veterinary periodicals which can be consulted in the library.

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THE V.V.B.F. (SIMPSON AND DUNKIN) GOLF TROPHIES

Owing to the Congress being held during the Scarborough Golf Week it has been impossible to arrange for the competitions to be played on any of the three Scarborough courses so permission has been given by the Filey Golf Club to use their course. Filey is only seven miles from Scarborough.

The Dunkin Cup for Ladies will be played on the morning of Wednesday, September 16th, consisting of 18 holes medal play under L.G.U. handicap.

The Simpson Trophy for Men will be played on the afternoon of Wednesday, September 16th, consisting of 18 holes medal play under lowest club handicap.

VICTORIA VETERINARY BENEVOLENT FUND

The Secretary begs to acknowledge the receipt of the following donations in memory of Professor James Macqueen:—

	£	s.	d.
Messrs. J. and H. Bell ...		10	6
Mr. J. F. Blennerhassett ...		15	0
Major G. W. Dunkin ...		10	6
Major T. G. Heatley	1	0	0
Professor J. McCunn ...	1	1	0
Major L. P. Pugh	1	1	0
Col. Graham Rees-Mogg ...	1	1	0
R.C.V.S.	1	1	0
R.V.C. Students' Union Soc.	1	1	0
Dr. E. S. Shave	1	1	0
Professor J. G. Wright ...	1	1	0
	£10	3	0

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ROYAL (DICK) VETERINARY COLLEGE

Extension Need Clamant

Appeal to the Public

The need for extension of the Royal (Dick) Veterinary College, Edinburgh, was described as clamant at the annual distribution of prizes which took place in the College on July 1st, and it was mentioned that an appeal for £20,000 of the £40,000 required would shortly be issued to the public.

Professor Sir Thomas Hudson Beare, who presided, pointed out that the semi-jubilee of the Principal of the College, Dr. O. Charnock Bradley, was to be celebrated this year. Dr. Bradley had, he said, served the College with courage, conviction, and splendid success during the 25 years he had held the office of Principal. Dr. Bradley had been not only a successful Principal, but he had been successful as a teacher, and he had added lustre to the College through the research work he had carried out and directed.

A Phenomenal Growth

Speaking of the proposed extension of the College, Sir Thomas Hudson Beare said—"We have outgrown our clothes. We must have an enlargement of our buildings, and an enlargement of our equipment. Our needs are clamant. We cannot carry on as we are at present. The growth in the number of students has been phenomenal during the last few years."

Additional facilities were required for research work, as well as greater accommodation for teaching, he remarked. No institution of the rank of the College could live by teaching alone. Its staff and its workers must be constantly striving to add to the human knowledge of the subjects which were dealt with at the College. Grass sickness, which was causing terrible losses to the farmers of Scotland, was, like cancer, baffling the keenest brains of the keenest research workers. There was a lack of men trained in the veterinary profession to undertake advanced research work of the type required in order to cope with that disease.

£40,000 for New Buildings

It was anticipated that the cost of the new buildings needed for the College would be at least £40,000, the Chairman stated. The Government had offered £20,000 towards the expenses of that enlargement, and within a few days a letter of appeal was to be sent out asking for subscriptions to make up the remaining £20,000. The ground was available, and only the money was needed. He did not think he was asking too much of the public when he asked them to subscribe generously. There was no question but that the health of any community depended largely on the quality of its food supply, and veterinary science was doing a great work in that respect.

"The College has had a wonderful history," Sir Thomas Hudson Beare added. "We want to carry on that history in a still more glorious fashion in the years to come. We have the staff, and we had good students, but we must have the equipment."

Reviewing the past session, Principal Bradley said that it had been one of success and progress. The College had again had a record number of students. Though the staff had had their work practically doubled during the last two or three sessions, he had not heard even the suspicion of a murmur. That the session had been one of progress was also evidenced by the fact that two new whole-time appointments had been made to the staff.

Town Council and College

Lord Provost Louis S. Gumley, who presented the prizes, said that the association of the Town Council with the College had reached back to the early days of the institution, and it might be interesting news to many to learn that a Lord Provost was among the first of those who recognised the importance of veterinary science and the desirability that Edinburgh should be a centre of veterinary education. Early in the nineteenth century Lord Provost William Arbuthnot suggested that the University should institute a Chair of Comparative Anatomy that should include veterinary physic (as he called it) and surgery. Either unfortunately or fortunately—it was difficult to be sure which—the University authorities did not see their way to follow the suggestion, and gave it as their opinion that the Highland Society were the proper body to which the suggestion should be made. Something more than a century had to elapse before the Lord Provost's vision became an actuality in modified form. But in October, 1935, the College was actually affiliated to the University.

But that was only one reason why it was fitting that a Lord Provost should lend his countenance to College functions. Of greater weight was the fact that, by his will, the founder of the College made the Town Council of Edinburgh his trustees, and for 40 eventful years the affairs of the College were administered by the Town Council. Further, Edinburgh prided herself on her public health services. In maintaining them in a state of efficiency veterinary science played its part.

An Imperative Necessity

Graduates and students were in a position to do something in return for any benefit they might have received from their Alma Mater. Extension of the College buildings was an imperative necessity, and graduates and students could help materially in the collection of the necessary funds.

On behalf of his colleagues and himself the Lord Provost congratulated Dr. Bradley on the attainment of his semi-jubilee as Principal of the College. "The high position which the College occupies in the veterinary world is due in no small measure to his unceasing and devoted labours," the Lord Provost said, "and we wish him continued success during the years to come."

Votes of thanks were moved by Dr. W. T. Ritchie, President of the Royal College of Physicians of Edinburgh, Sir W. W. M'Kechnie, and Major R. F. Brebner.

The list of prizewinners is as follows:—

FIRST YEAR

Chemistry.—Silver medal, J. Millar; bronze medal, E. A. Macpherson. Practical Chemistry.—Bronze medal, J. Millar. Biology.—Silver medal, J. M'Q. Brown; bronze medals, J. Millar and K. S. R. Rangappa. R. Stewart MacDougall Prize.—J. M'Q. Brown.

SECOND YEAR

Anatomy, Junior.—Silver medal, J. H. Wilkins; bronze medal, H. E. Prytherch. Practical Anatomy.—Silver medal, J. H. Wilkins. Physiology.—Silver medal, W. S. Biggar, B.Sc.; bronze, medal, G. D. Leslie. Practical Physiology.—Bronze medal, J. Keppie. Histology and Embryology.—Silver medal, J. Keppie; bronze medal, J. H. Wilkins. Zootechny.—Silver medal, K. C. Comrie; bronze medal, D. C. Henderson. The Gemmell Prize.—J. H. Wilkins.

THIRD YEAR

Senior Anatomy.—Silver medal, H. B. Parry; bronze medal, D. Luke, B.Sc. Practical Anatomy.—Silver medal, W. Clark. Pharmacology.—Silver medal, D. Luke, B.Sc.; bronze medal, G. W. Argo. Hygiene.—Silver medal, A. T. Cowie; bronze medal, A. G. Rae. Craig Robinson Medal.—W. Clark. The M'Callum Prize.—D. Luke, B.Sc.

FOURTH YEAR

Pathology.—Silver medal, J. W. Whittick; bronze medal, D. D. Ogilvie. Parasitology.—Silver medal, J. W. Whittick; bronze medal, J. Norval.

FINAL

Medicine.—Silver medal, J. Finlayson; bronze medal, J. G. K. Henderson. Surgery.—Silver medal., J. G. K. Henderson; bronze medal, A. Ferguson. Obstetrics.—Silver medal, J. G. K. Henderson; bronze medal, J. Finlayson. Clinique.—Silver medal, L. F. Robertson; bronze medal, J. Finlayson. Macfarlane (Aggregate) Medal.—J. G. K. Henderson.

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UNIVERSITY OF EDINBURGH VETERINARY EXAMINATION RESULTS

At the Graduation Ceremony held in the University of Edinburgh on Friday, July 3rd, 1936, the following former students of the Royal (Dick) Veterinary College graduated.

Doctor of Science in Veterinary Science (D.Sc.).—James Carmichael: Thesis, "Investigations into Tuberculosis in Uganda." Phillippus Lodewicus le Roux: Thesis, "Observations on Schistosomiasis and Paramphistomiasis in Sheep, and notes on the Morphology of Helminths from Mammals and Birds in South Africa."

Bachelor of Science in Veterinary Science (B.Sc.).—Kenneth Paxton Anderson (M.R.C.V.S.); Reginald Ford (M.R.C.V.S., D.V.S.M.); Stanley Talbot Harriss (M.R.C.V.S., D.V.S.M.); William McGregor Henderson (M.R.C.V.S.).

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LIVERPOOL UNIVERSITY B.V.Sc. EXAMINATIONS

Among the results of the Examinations in the University of Liverpool held in the past month were:—

DEGREE OF B.V.Sc.

(Old Regulations)

FINAL EXAMINATION

Part II

Henderson, Ruth M. *†Waddington, F. G.
Morton, Dorothy R.

*Distinction in Advanced Veterinary Bacteriology.

†Distinction in Toxicology and Jurisprudence.

THIRD EXAMINATION

(New Regulations)

Part III

Dransfield, J. W. *Williams, R. E.
Furber, T. R. Wood, R. B.
Hancock, J. L.

*Distinction in Genetics.

FOURTH EXAMINATION

(New Regulations)

Jones, S. Shirley, G. N.

FINAL EXAMINATION

(Old Regulations)

Part I

Massey, Kathleen M. Young, S. C.

Passed in Individual Subjects

Needham, A. J. E., Veterinary Medicine, Veterinary Surgery (Including Obstetrics).

THIRD EXAMINATION

Part II

Dransfield, J. W. Williams, R. E.
Hancock, J. L. Wood, R. B.
Kennedy, G. Y.

FIRST EXAMINATION

Part I (Chemistry)

*Broadbent, Beatrice Greenway, E. D.
Coates, P. D. L. Kenyon, J. E.
Davidson, F. L. Lewis, P. D.
*Dye, R. W. Protheroe, S.
Edwards, C. M. Scott, Mary F.

Part II (Physics)

Broadbent, Beatrice Jones, I.
*Coates, P. D. L. Lewis, P. D.
Davidson, F. L. Protheroe, S.
Dye, R. W. Scott, Mary F.
Edwards, C. M.

*Passed with Distinction.

Part III (General Biology)

Broadbent, Beatrice Dye, R. W.
Clarke, R. Edwards, C. M.
Coates, P. D. L. Lewis, P. D.
Davidson, F. L. Scott, Mary F.

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LEGAL NOTES

Anthrax Case in Cheshire.—John Cornes, Old Hall Farm, Reaseheath, was summoned for failing to report having a diseased animal, for failing to detain it, and for permitting its skin to be cut.

Archie Cliffe, Farcroft Farm, Wrenbury Heath, and Richard Cliffe, Wrenbury Heath, were summoned on similar charges.

Mr. McLoughlin prosecuted, and Mr. J. P. Whittingham defended.

The charges were laid under the Anthrax Order.

Mr. McLoughlin suggested that Mr. Cornes suspected pneumonia, but the reasonable thing for him to have done in that case was to have had the animal examined. It was significant, Mr. McLoughlin said when referring to the charges

against the Cliffes, that part of the animal was not sent to market. The Cliffes, he submitted, must have known that the animal had been affected with anthrax.

P.-c. Crump, Worleston, said that at 3.30 p.m. on April 14th he visited Mr. Cornes's farm and asked him about the condition of a nine months' old bull, and that, in a statement, Mr. Cornes said the bull was one of two bull calves and that he noticed on April 11th that one of the bulls, a dark roan, looked starved. On the Sunday morning following the bull would not eat, and he concluded that it had pneumonia, and that the best course for him to take was to have it slaughtered; and Mr. Cliffe, with whom he had communicated, slaughtered it at the farm the same day and took away the carcase.

Cross-examined, witness said the other bull appeared to be in good health, and no other animal had been affected on the farm.

Archie Cliffe, in a statement, said he went with his brother to the farm in response to a communication from Mr. Cornes and slaughtered the bull, which was in a dying state. He later dressed it and took it sound to his cousin, Albert Cliffe, who took it to Manchester abattoir.

Cross-examined, witness said the bull was slaughtered on April 12th. Cliffe knew that the carcase at Manchester would be inspected before being offered for consumption.

Alec Charles Brooks, a salesman, gave evidence of having received at Manchester meat market the forequarters of a carcase of "baby beef."

Harry Dom Heggarty, veterinary inspector at the market, said the carcase had a ruddy appearance, and when he tested it he found anthrax bacilli. One kidney was missing, which was unusual.

In cross-examination, witness said the conditions present in an anthrax-affected animal were not the same as in putrefaction. The Ministry in an anthrax case finally confirmed suspicion.

Isn't it common knowledge that such animals are usually found dead by their owners?—Yes.

John Spruell, veterinary inspector of Manchester market, said he saw the dressed portions on a stall and made a test which the Ministry afterwards confirmed. When visiting Farcroft Farm he did not see all the offal. He was told that the spleen was not the spleen of this animal.

James McWilliam, another veterinary inspector, asked by the Chairman, "Do you get much meat unfit for human consumption that is destroyed?" replied, "Oh, certainly, but not of anthrax-affected carcases."

Why not?—Because nowadays we don't meet with it in the abattoirs so often as we did 20 years ago, when I have seen as many as three affected carcases in a fortnight. Nowadays we do not get one in six months.

Mr. McWilliam said he examined the offal and hide of the animal, and as a result he found anthrax bacilli in the head and in the veins of the feet.

Mr. Whittingham: Would you agree that anthrax is not suspected unless the animal dies?—I think that is quite right.

John Cornes, giving evidence, said he had been at his farm for ten years, and he had never had a case of anthrax there. He had never seen anthrax. He reared the two bulls on the farm, and kept them in a loose-box. On Saturday, April 11th, he noticed that one of them had got a chill. Later he thought it had developed pneumonia, and he asked Mr. Cliffe to slaughter it. If he had had any suspicion that the animal was suffering from anthrax, he would not have sent it away under any consideration.

Richard Stanley Cliffe said that when he killed the animal he had three cuts on his hands, and he would not have touched it if he thought it had anthrax. He did not notice anything wrong about the carcase.

Archie Cliffe corroborated his brother's evidence.

Mr. Whittingham submitted that not one farmer in a hundred reported a case of illness in his stock unless it was serious. Farmers were to some extent inspectors, and they treated the animals themselves. It had been established that the first sign of anthrax was the discovery of a dead body. If the animal in question was suffering from pneumonia it was not a crime to send it to see if it were fit for human consumption.

The Chairman said the Bench had come to the decision that there must be a conviction. On the charge of failing to report a diseased animal Cornes would be fined £1, with costs. The other two defendants would be fined £1 on each of the three charges preferred against them—£3 each in all—and costs.

. . . . .

Neglecting an Aged Horse.—In a case at Malvern in which a smallholder, at the instance of the R.S.P.C.A., was charged with cruelty to a horse by neglect, a storekeeper of Malvern Common said he watched the horse on the common for two or three weeks after his attention had been attracted by its lameness. When it became worse day by day, he reported the matter to the police. He had had over 20 years' experience of horses in the Royal Field Artillery, and knew this particular animal, a dark gelding, which had been sold to defendant by the Territorial Association.

An inspector of the R.S.P.C.A. stated that he had reminded defendant that he had cautioned him about the horse on January 7th and advised him to get treatment. The horse was lame in both fore legs. Treatment would have improved its condition.

Mr. J. Currie, M.R.C.V.S., of Worcester, said the animal had great difficulty in walking, and he failed to find any signs of treatment. If the horse had been treated in the early stages, there was the possibility that it might have become well again. It was in very good bodily condition.

Defendant said he bought the horse, which was twenty years old, from the Territorial Association about six years ago. He treated it himself because he could not afford a veterinary surgeon. It had only been worked four times during the last six months and no one, other than the R.S.P.C.A. inspector, had pointed out to him that the horse was lame. He had since sold the horse to a man at Gloucester for £1, believing that it was to be slaughtered, but apparently that was not the purpose.

After a retirement, the Bench imposed a fine of £2, and £2 towards the costs.

The Chairman said the R.S.P.C.A. would be requested to keep the horse under observation.

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A resolution recommending New Zealand's Labour Government to remove the present embargo on British livestock was passed at a conference of the New Zealand Veterinary Association on June 26th.

H.M. STATIONERY OFFICE PUBLICATIONS

The undermentioned have been published recently. Copies can be purchased through any bookseller, or indirectly from H.M. Stationery Office, at the following addresses: London: Adastral House, Kingsway, W.C.2, and 28, Abingdon Street, S.W.1; Cardiff: 1, St. Andrew's Crescent; Manchester: York Street; Edinburgh: 120, George Street.

	Price Net. s.	d.	*Post Free.* s.	d.
COMMAND PAPERS:—				
[5204.] Scottish Health Services. Report of the Committee on.	6	0	6	5
WAR OFFICE:—				
Veterinary Corps, Royal Army, Regulations for Admission to Commissioned Rank in, June, 1936. (57-9999) ...		3		3½
SCOTTISH OFFICE:—				
Milk Acts, 1934 and 1936. Arrangements, under Sect. 11 of the Milk Act, 1934, for increasing the Demand for Milk by the Supply of Milk at Reduced Rates for Consumption by Children at Centres in Glasgow within the Area of the Scottish Milk Marketing Scheme, 1933. June 25th, 1936. (49-9999)		1		1½

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INTERNATIONAL SOCIETY FOR MICROBIOLOGY

The second international congress of the above Society, of which a previous notice appeared in the *Veterinary Record* of January 4th, 1936, will be held in London this year from July 25th to August 1st, under the presidency of Professor J. C. G. Ledingham, F.R.S. Most of the sessions will take place at University College, Gower Street, while additional accommodation will be made available at the adjacent London School of Hygiene.

As microbiology has become such an enormous subject, it has been necessary to divide the work of the Congress into eight sections, of which one (Section 4) will be run in two parts. There will also be a number of joint discussions between different sections:—

Section 1.—General Biology of Micro-organisms.

Section 2.—Viruses and Virus Diseases in Animals and Plants.

Section 3.—Bacteria and Fungi in Relation to Disease in Man, Animals, and Plants.

Section 4.—Economic Bacteriology, Soil, Dairying, and Industrial Microbiology.

Section 5.—Medical, Veterinary and Agricultural Zoology and Parasitology.

Section 6.—Serology and Immunochemistry.

Section 7.—Microbiological Chemistry.

Section 8.—Specific Immunisation in the Control of Human and Animal Disease.

Veterinarians would be particularly interested in the work of Sections 3, 5, and 8, but by way of illustration the following discussions may be mentioned. In Section 1, bacterial variation will be considered and the influence of this factor upon the pathogenic properties of micro-organisms. In Section 2 the evidence concerning the agency of viruses in causing cancer will be examined. Section 3 will be concerned with streptococci that cause mastitis, lymphangitis and suppurative conditions in animals, as well as with those that cause scarlet fever and other disease conditions in man, and also with bacteria that cause acute inflammation of the alimentary tract. In Section 5 will be included discussions on chemotherapy and the mechanism of drug action upon parasites, on immunity against animal parasites, and on coccidiosis in domesticated animals. In Section 8 will be considered the prophylaxis and serum treatment of human and animal diseases caused by anaerobic bacteria, and also the relative value of antitoxic and antibacterial immunity in the prophylaxis and treatment of human and animal disease.

The Congress will be officially opened by Mr. Ramsay MacDonald, Lord President of the Council, at 9 p.m. on July 25th at University College. Receptions will be held by H.M. Government, by the Royal Society of Medicine and by the Royal Society, and numerous excursions to places of scientific and general interest have been arranged.

A registration form and further particulars can be obtained from Professor J. C. Drummond, University College, Gower Street, W.C.1.

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FIRST INTERNATIONAL CONFERENCE ON FEVER THERAPY

The first international conference on fever therapy, originally scheduled for the end of September, 1936, as announced in a recent issue of this journal, has been postponed because of numerous requests, to permit more time for the preparation of material. The new dates set for this conference are March 30th to April 2nd, 1937. The sessions will be held at the College of Physicians and Surgeons, Columbia University, New York City. Full information regarding the conference may be obtained from the General Secretary, Dr. William Bierman, 471, Park Avenue, New York City, U.S.A.

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LONDON CONFERENCE TO DISCUSS TUBERCLE-FREE HERDS

At the Conference of the National Association for the Prevention of Tuberculosis from July 16th—18th, "Tubercle-free Herds, Present Position and Policy" will be considered. The discussion will be opened by Major D. S. Rabagliati, F.R.C.V.S., B.Sc., D.V.S.M., President of Yorkshire Veterinary Medical Society. He will be followed by Dr. J. B. Buxton, Professor of Animal Pathology at Cambridge, Major Brennan DeVine, Chief Veterinary Officer of Birmingham, and Dr. L. Jordan, Chief Veterinary Officer to West Sussex County Council.

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MEDICINE AND THE PRESS

We are often confronted with the problem of how best the public press might be restrained from publishing information on veterinary subjects that is not wholly accurate and sometimes merely sensational, bringing as it sometimes does the names of individual members into unwelcome notoriety. The views of the sister profession, as represented in the following annotation in a recent issue of the *British Medical Journal* are illuminating: "For good and obvious reasons most medical men dislike receiving publicity in the lay press, especially when their names are associated with the publication of details of a startling or unusual case. We often print disclaimers from medical men protesting against the publicity, and stating that comment

in the lay press appeared without their knowledge or consent. That some harm may be done, and probably is done, by the undue prominence given in a daily newspaper to matters that may arouse fear cannot be doubted. The alarmist statements that have appeared about maternal mortality is a case in point. Another is the reports on cardiac resuscitation. But here, one might imagine, the public is as likely to pay attention to the skill of the doctor in bringing back the dead to life as to the risks of anaesthesia. It has been suggested that the Press should by some means or other be discouraged from "lifting stories" from medical journals, that some control should be exercised. But we are still a democratic country and any attempt to muzzle the Press would rightly be resisted. Matters of health and disease are naturally of great interest to the man and woman in the street, and the lay public would become very suspicious of the medical profession if the latter tried to suppress news and to keep its publications secret. The public is suspicious enough as it is, and the strength of the profession lies in the fact that it is ready to take the public into its confidence, that it does not—as do many unqualified healers—pretend to powers which it has not. Publicity, in the more responsible newspapers at all events, is even welcomed, and we should recognise that in this way a useful service is being offered. The daily paper has to give its readers information that it thinks will be of interest; the interpretation of what is of interest depends upon the particular public the particular paper is trying to reach; the method of presentation depends upon the standard of journalism thought suitable by this or that periodical; the standard of taste and education of the average reader of the popular daily is not likely to be as high as that of the reader of the *Times* or the *Manchester Guardian*. What Ibsen called the damned compact majority is probably more liable to error than the informed minority. These things being so, it is perhaps idle to raise objection. A more satisfactory method of abolishing the evil of misrepresentation and vulgar exploitation of medical news would be by way of co-operation instead of by recrimination. A medical news service under the control of a responsible body might be welcomed by the lay press, and in this way valuable health propaganda could be conducted to the benefit of the community at large. If this co-operation were forthcoming we believe that a certain measure of control of news would be accepted—of news, that is, which would do harm rather than good. The difficulty of providing such a service is another matter."

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INFLUENCE OF OESTROGENS ON THE PROSTATE GLAND

S. Zuckerman of the Department of Human Anatomy, Oxford, in a letter to *Nature*, of June 20th, expressed the opinion that recent investigation[1] suggested that the benign enlargement of the prostate which occurred spontaneously both in elderly men and aged dogs was a consequence of oestrogenic stimulation. No evidence had, however, been found hitherto which demonstrated the identity of the histological changes throughout the naturally and experimentally enlarged prostates, and only such evidence could provide the conclusive step in the substantiation of the hypothesis. It was therefore important to record the fact that a specimen of a spontaneously enlarged prostate in a dog which had recently become available for study, presented a histological picture identical with that provided by the prostates of dogs experimentally treated with relatively large doses of oestrone[2]. The characteristic epithelial changes of the experimental prostate, which were not seen in the usual spontaneous enlargement, were reproduced in detail in that specimen, and it might be assumed that their usual absence was due to a lesser degree of oestrogenic stimulation than was the case in the animal under consideration.

The specimen would shortly be reported on in detail in collaboration with Mr. J. R. Groome, of the Department of Zoology, University of Oxford.

[1]S. E. de Jongh, *Arch. Int. Pharm. Therap.*, **50**, 348 (1935). H Burrows, *Amer. J. Cancer*, **23**, 490 (1935). A. S. Parkes and S. Zuckerman, *Lancet*, **228**, 925 (1935). S. Zuckerman, ibid., **230**, 135 (1936).

[2]S. E. de Jongh, *Acta Brev. Neer.*, **5**, No. 10 (1935).

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SEXUAL PERIODICITY AND THE CAUSES WHICH DETERMINE IT

By kind permission of the Royal Society we are enabled to give below the substance of the Croonian Lecture delivered before the Society on June 18th by Dr. F. H. A. Marshall, C.B.E., F.R.S., and which will be published later by the Royal Society in its Philosophical Transactions. ', Sexual periodicity, like all vital phenomena, is conditioned by the environment. Under the term 'environment' are included food, light, temperature, the humidity of the atmosphere and in aquatic species of animals, the hydrogen ion concentration of the medium and all the other chemical and physical conditions of the surroundings.

"In all animals with reproductive organs, there is a tendency to an alternation of periods of activity and periods of rest associated with the development of the gonads and their exhaustion after they have discharged their products, as seen especially in those animals which spawn in bulk. In the lower animals in which there is no nervous system, the environment must be supposed to act directly upon the organism, and so influence the rhythm of reproduction. But in the higher animals sexual periodicity is determined and regulated by special factors which, though generally similar, show great variation in passing from group to group and from species to species and even from breed to breed.

"These factors are: (1) endocrine factors associated especially with the gonads (and their successive functional phases) and with the anterior pituitary; and (2) exteroceptive factors which through the intermediation of the nervous system act upon and modify the endocrine factors. In the male mammal the testes produce a hormone, testosterone, which is responsible for all the changes which take place in the accessory sexual organs and in the secondary male characters in association with the sexual season; the testis is acted upon by a hormone formed by the anterior pituitary, and the latter organ is influenced by exteroceptive and possibly also other stimuli coming from the outside environment. In the majority of animals, light is probably the most important factor, but there are others.

"In this way, the sexual rhythm is normally brought into relation with the seasonal changes, and the activity of the anterior pituitary and that of the testes rise and fall almost simultaneously. The accessory organs may be brought

into a state of activity outside the normal breeding season by the injection of testicular hormone, by the injection of an anterior pituitary hormone, and, in many species also, by light irradiation.

"In the female mammal, the processes are similar but the matter is complicated by the occurrence of pregnancy and, in polyoestrous species, by the recurrence of heat periods at short intervals within the sexual season. There are two main phases of ovarian activity: (1) the follicular or oestrous phase which is induced by the ovarian hormone, oestradiol; and (2) the luteal phase of pregnancy, pseudo-pregnancy and the short dioestrous interval (in polyoestrous species), which are generally controlled by the hormone progesterone formed by the corpus luteum. The oestrous-producing substances found in the urine and elsewhere during pregnancy and the oestrin in the urine of the male are to be regarded as metabolic products of no physiological significance in relation to the control of the cycle, and it is to be pointed out, first, that many other substances having oestrogenic properties when injected into animals experimentally, have been extracted from organisms both animal and vegetable or even have been prepared synthetically, and secondly, that the oestrins which are excreted during pregnancy occur in the urine mostly in a combined and inactive form.

"The endocrine activities of the ovaries are themselves controlled by the anterior pituitary, but whether there is one or more than one gonad-stimulating hormone formed by the anterior pituitary is still doubtful. It appears certain, however, that the secretory activity of the anterior pituitary must vary quantitatively if not qualitatively in different phases of the oestrous cycle. In species like the rabbit and the ferret which normally only ovulate after the orgasm, the switch over from the oestrous to the luteal phase of the cycle is effected by the anterior pituitary, and can be induced experimentally by the injection of a pituitary extract or by electrical stimulation of the central nervous system, thereby producing a general stimulus comparable to the orgasm. Moreover, in the rat, which ovulates spontaneously, a comparable condition of pseudo-pregnancy can be induced by experimental stimulation. The duration of the corpus luteum therefore may depend upon a hormonic stimulus from the anterior pituitary.

Further, the condition of pregnancy apparently reacts upon the pituitary and so controls the duration of the corpus luteum of pregnancy, and in rats stimulation of the nipple by sucking or artificially by other means and without the secretion of milk, will react on the pituitary and maintain the corpus luteum of lactation. In the absence of any exteroceptive stimuli which alter the phases of the cycle, the alternation between the oestrous phase and the dioestrous phase may be controlled by the ovary and anterior pituitary acting and reacting on one another, the pituitary initiating the oestrogenic activity of the ovary, which then has a temporary inhibiting effect on the stimulating capacity of the pituitary until such time as the production of oestrin is reduced, when the pituitary responds by an increased production of ovary-stimulating hormone. There is certain experimental evidence for this view.

"The phase of lactation also, is believed to be controlled by the anterior pituitary, and a substance has been extracted from it which stimulates milk secretion. The same substance, which is called prolactin will also stimulate the crop gland in the pigeon and induce incubation. This is in conformity with the view that the reproductive hormones were metabolic by-products before they acquired hormonic activities, and that other organs and tissues in the body gradually learnt, so to speak, to respond to their presence in the progress of evolution and so promote functional correlation between different parts of the body.

"In the female mammal, like the male, light and ultra-violet irradiation may induce oestrus outside the breeding season, the stimulus probably acting upon the pituitary. The same is true for many species of birds, but both in mammals and birds there is much species variation, each kind of animal requiring its own appropriate stimulus of light or other factors. The successive phases of the cycle in birds are likewise under the influence of anterior pituitary gonad-stimulating mechanisms, but they are very liable to be interfered with by exteroceptive stimuli.

"In most birds ovulation depends upon coition, or at any rate on sexual display, and there is evidence that courtship phenomena play an important part in effecting the necessary synchronisation of the anterior pituitary processes in the male and female. Such a theory as to the biological value of sexual display and adornment may take the place of the Darwinian theory of sexual selection, and without encountering the difficulties in the way of that theory, one of the most formidable of which is the fact that birds of many species pair before they display and often pair for life. The biological disadvantages of an ineffective synchronisation between the various generative functions is illustrated from the domestic animals, in which temporary sterility is common."

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POSTER COMPETITION IN AID OF THE GREAT ORMOND STREET HOSPITAL FOR SICK CHILDREN

In connection with the Reconstruction Fund of the Great Ormond Street Hospital for Sick Children, prizes are offered for the best Poster Design submitted, having for its purpose the making of an appeal for funds for the children's hospital. Full particulars relating to the poster competition itself will gladly be sent on application to Lady Robertson, Poster Committee, The Hospital for Sick Children, Great Ormond Street, London, W.C.1.

Posters should be delivered to Messrs. Thomas Agnew and Son, Limited, 43, Old Bond Street, London, clearly endorsed "Poster Competition," by not later than 12 noon, July 25th. The judges include the Earl of Leven and Melville, K.T., Chairman, Great Ormond Street Hospital, and the whole scheme is under the Chairmanship of Lady Robertson.

GRANTS FOR CLYDESDALES

Clydesdale Horse Society have received a letter from the Secretary for Scotland intimating that an informal committee is to be appointed to hear representations on the question of grants for heavy horse breeding in Scotland. The committee, it is understood, will meet in the autumn. It was decided that evidence in support of the renewal of the grants for heavy horse breeding should be submitted.

Joint action is also to be taken by the society, with the National Farmers' Union of Scotland, in approaching the Import Duties Advisory Committee in connection with the free importation of horses from abroad.—*Farmers' Weekly.*

Correspondence

The views expressed in letters addressed to the Editor represent the personal view of the writer only and must not be taken as expressing the opinion or having received the approval of the N.V.M.A.

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PRINCIPALSHIP OF THE ROYAL VETERINARY COLLEGE

Retirement of Sir Frederick Hobday

A growing volume of correspondence upon the above subject has reached the office of this journal. The Editorial Committee feel that rather than publish separately the letters received, better purpose will be served by giving expression to their context from time to time in leading articles. While the Committee will therefore welcome the receipt of the views of members of the N.V.M.A. on the subject of this correspondence, it has decided that henceforward the publication of the correspondence shall cease.

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SIR FREDERICK HOBDAY PORTRAIT FUND

To the Editor of The Veterinary Record

Sir,—Since you published the last list of subscribers to the above fund, I am very pleased to report that a most gratifying number of veterinary surgeons have forwarded cheques. To the following gentlemen I gratefully tender my best thanks:—

H. W. Brekke	Brayley Reynolds
H. Greenfield	J. T. Edwards
C. J. Lawrence	J. J. Davis
G. E. Oxspring	J. S. Steward
S. E. Holmes	S. Smith
G. Mayall	H. E. Cross
W. Pauer	W. R. Wooldridge
P. Dayer-Smith	H. Bywater
W. D. Rees	T. Dunlop Young
A. F. Castle	H. P. Hamilton
W. J. Browning	Western Counties V.M.A.
O. V. Gunning	C. W. Ottaway
F. Taylor	A. Dobie
E. L. Clarke	W. Denington
J. H. Taylor	G. N. Bushman
W. Howes	Herbert King
W. A. Campbell	Cyril King
E. W. Parks	Nevill King
J. Peddie	G. O. Davies
E. Lainé	J. Chalmers
J. W. McIntosh	J. Craft
W. Woods	W. W. Lang
A. Barr	W. R. McKinna
E. P. Edwards	A. F. Callanan
W. Reekie	H. B. Collet
R. J. Foreman	F. Beckett
M. G. Byerley	W. H. James
A. Sams	E. Thorburn
G. Gibbings	H. Wilkins
J. Hickman	F. Ware
F. L. Gooch	L. C. Tipper
Dr. Amoroso	G. R. Knott
H. G. Lepper	F. T. Harvey
T. W. Lepper	F. C. Minett
W. S. Stevens	J. R. Barker
G. W. Foote	G. H. Jelbart
S. H. Hobson	W. Cabot
J. Fox	W. Trigger
B. M. Lock	J. Coleman
A. M. Pryer	C. Formston
D. Imrie	J. W. Holmes

The total amount so far collected is £118 16s., and has enabled us to put the work of painting in hand.

Yours faithfully,
Hamilton Kirk,
Treasurer, Hobday Portrait Fund.

658, Finchley Road, N.W.11.
July 6th, 1936.

ANNUAL REPORT OF THE BIRMINGHAM VETERINARY DEPARTMENT

To the Editor of the Veterinary Record

Sir,—I was interested to note that in the summary of the Birmingham Veterinary Department's Report which appeared in your issue of May 16th, there was an omission from the list of that Department's activities. I refer, of course, to the Birmingham Scheme, under which any herd from which milk goes into the City is tested by the Department's officials, *gratis*.

I write to draw attention to this omission in the hope that a wider knowledge of its implications may perhaps lead those who read the *Veterinary Record* to a fuller appreciation of the difficulties of those still in private practice who are up against such competition as that from the Birmingham Veterinary Department.

Yours faithfully,
Paul Crosfield.

Chipping Norton,
Oxon.
July 4th, 1936.

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RETENTION OF THE AFTERBIRTH IN THE MARE

To the Editor of The Veterinary Record

Sir,—Major Heatley's letter of June 21st and Mr. Roberts' of July 4th, prompt a reply.

Major Heatley suggests that I have not met the type of case he means, *viz.*, that in which the membrane will not stand twisting. I agree, because I am certain that such cases do not occur, and here I come to my original comment —"provided the technique is correct." Major Heatley says that in my letter I described *well* the classical method of procedure but from Mr. Roberts' remarks I now realise that I did not. He asks, "What part of the membrane do I twist?" To get it into a workable mass I do as the novice he quotes: I twist everything from, say, above the mare's hock. At the same time (and this very important point I left out of my last letter) I *lift* or *have lifted* this portion. This procedure forms the membrane into a heavy cord at the vulva and as best I can I grasp this and on introducing my hand into the vagina pick up any strands that are found and involve them in the twist. At the same time (another important point I missed), I *push* the mass with my operating hand while squeezing the membrane at the point of attachment. I stress *pushing* because I absolutely disagree with Mr. Roberts' method of gradual traction. I am certain that this tends to shredding, however gentle the traction may be.

I can assure Major Heatley that my antagonism to douching arises from unfortunate experience (I hope he does not reply—faulty technique).

As regards chocolate coloured fluid, I scoop out as much of this as possible with my cupped hand before introducing a pessary.

I recently used in a mare *in extremis* neosalvarsan intravenously, besides routine treatment. Recovery was rapid.

May I crave further space to stress the following points:—

(1) Push the membrane at the same time as twisting and squeezing it.

(2) Never introduce fluid of any description into a mare's womb (or into a cow's for that matter).

Yours faithfully,
T. J. Margarson.

Camden House,
London Road,
Stroud, Glos.
July 7th, 1936.